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WITH THE ASSISTANCE OF MANY SCHOLARS AND MEN OF SCIENCE.

VOLUME VI. L TO N.

PART II.

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By HENRY BRADLEY,

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M.A. OXON.; M.A., LL.D. ST. ANDREWS.

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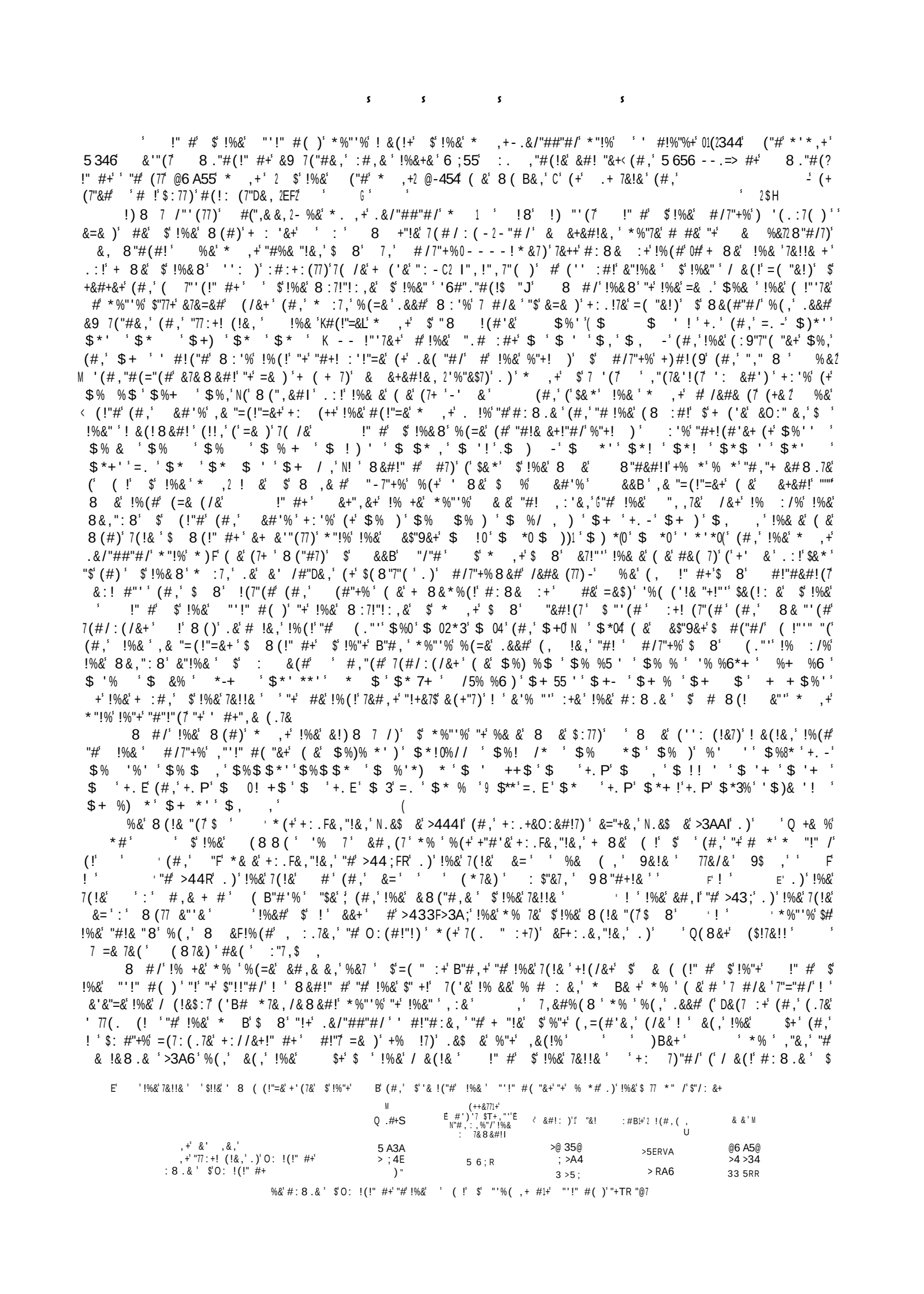

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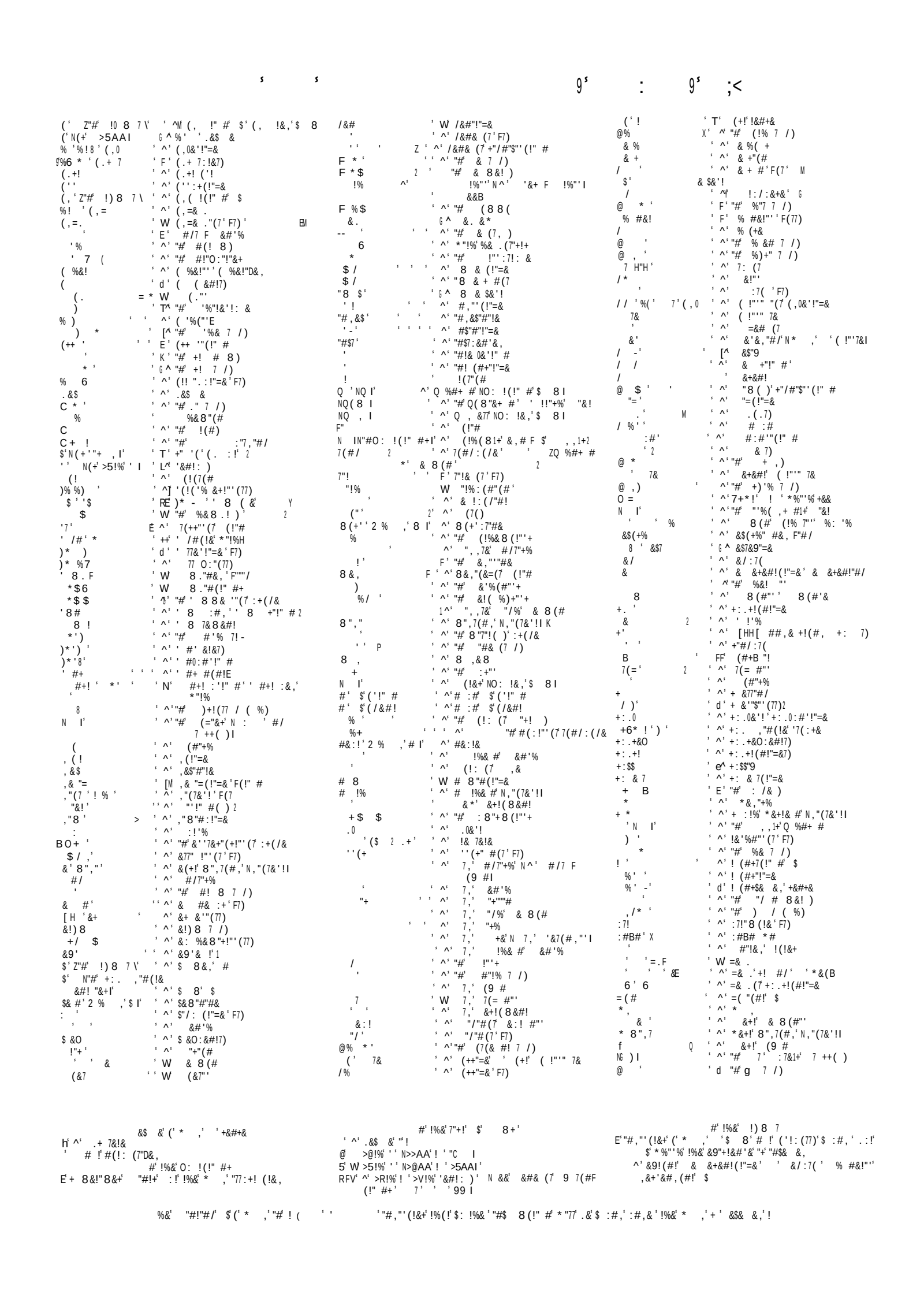

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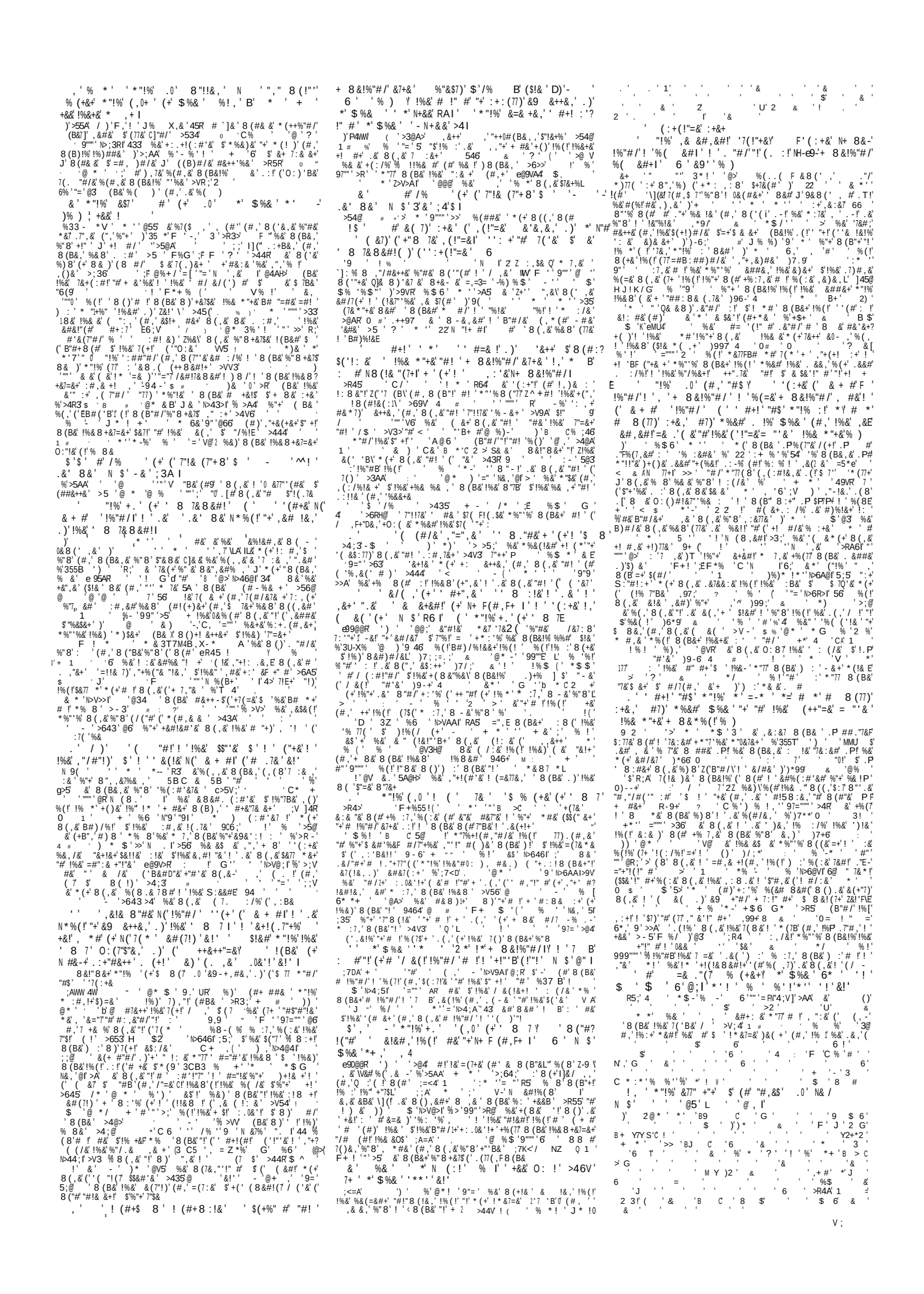

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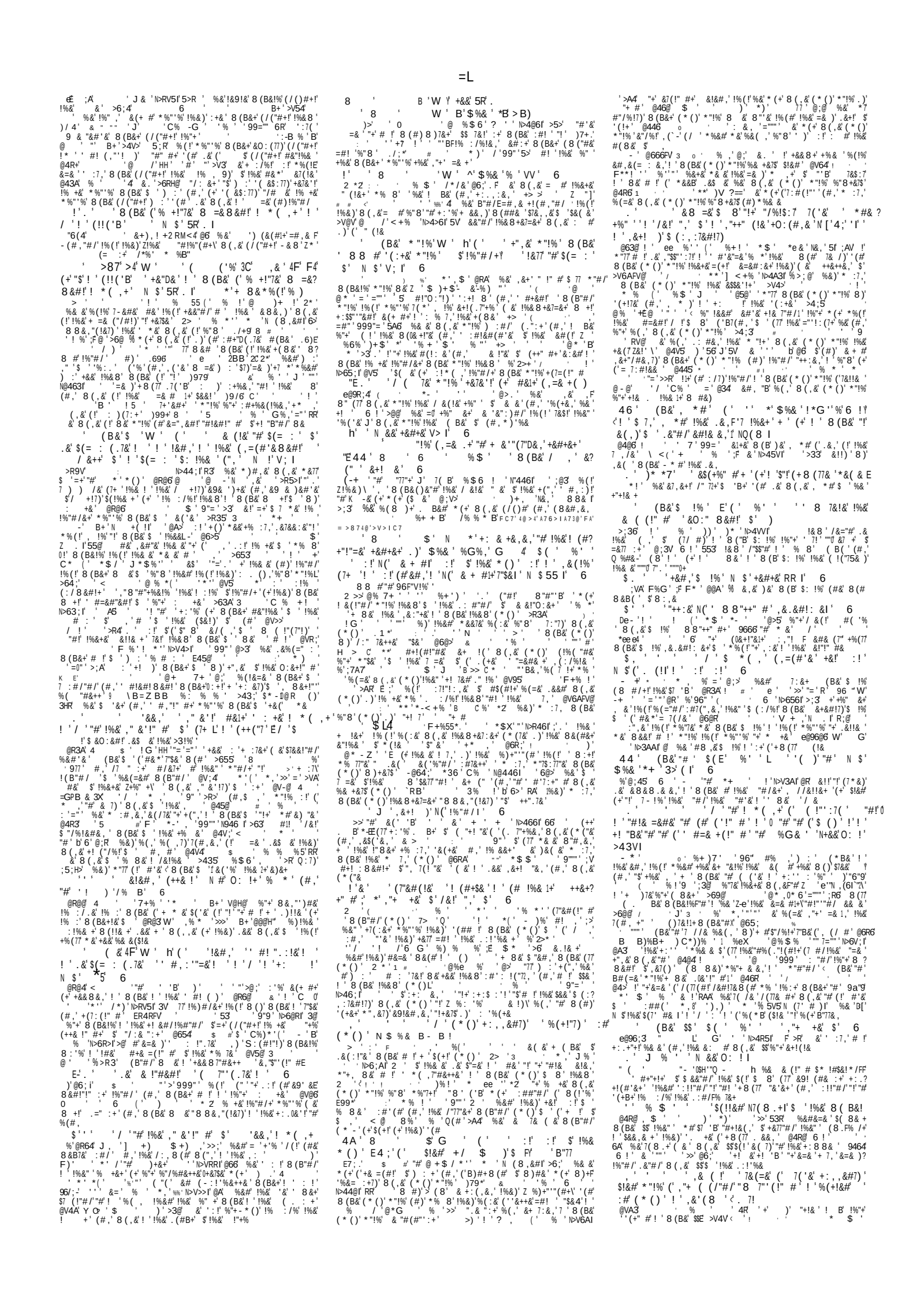

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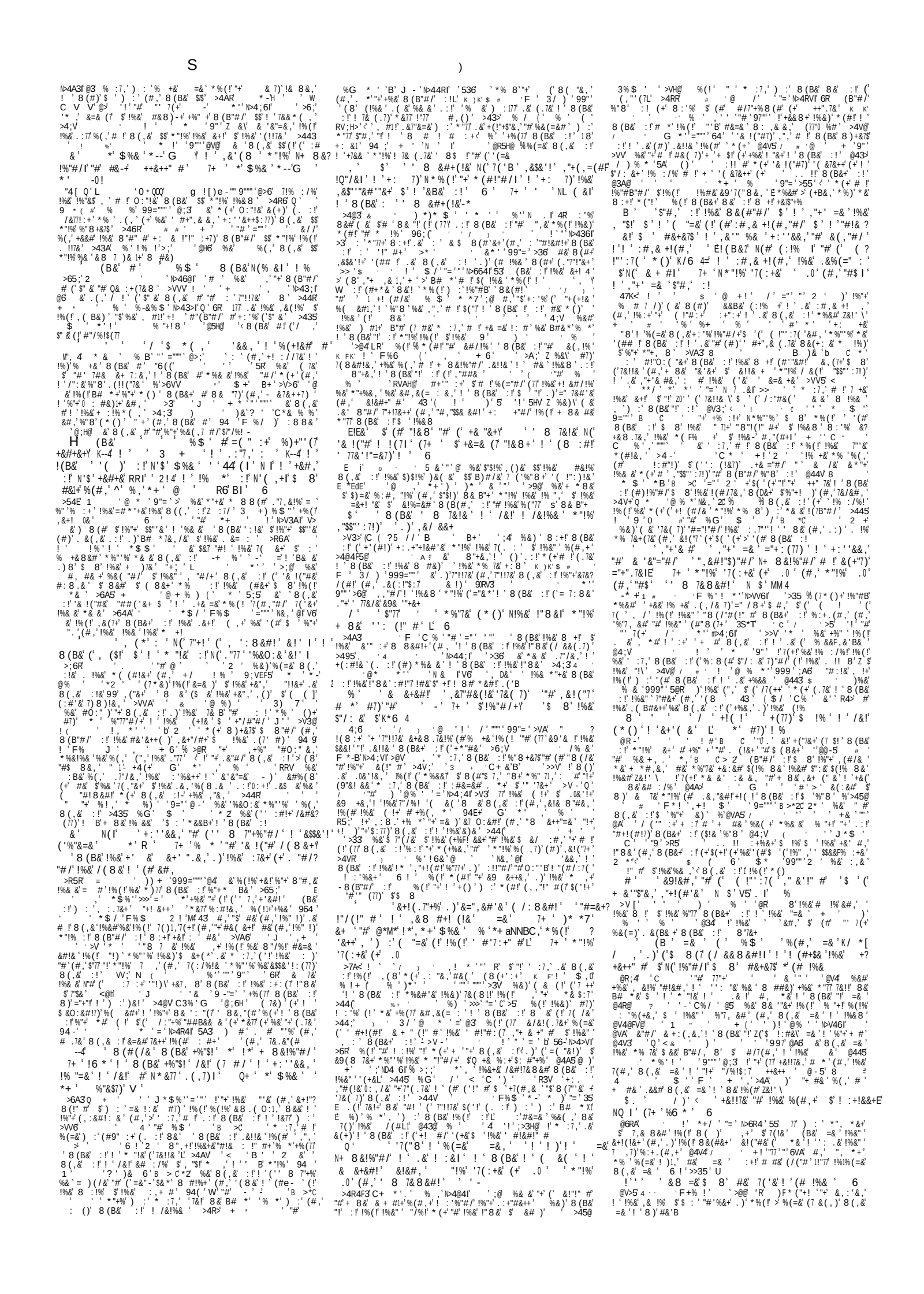

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-* ' & ' * 0 * ' ' + '9"= ' >66' $' !%&) ' Z ! ' "#' +' &, -' (&' # ! ' =& 1, ' !%&) * "77 . &' (7!&, ' * ' & ' +()' "! "+' (7!&, ' * %&#" "! "7"&+' (. =&' :#, ' (#, ' +&#, +' : !' "!+' ! ' * %" "%" "+' B"77&, ' .)' !%&' " ' >V65' + +$' + ' %&, ' @!' @ ' : #& < &&, "$" !" "+' # ! ' =& &, ' (+' + #' (+' + * # E' *"77 + :!' & 8 (!: &7) ' 8 (7!' ' 8 :7, ' 9469' , $ ' ') ' *) ' '# ' ;>4' $!& ' !%&' +&&, +' % (=&' .&' 8 &' +(!: ? (!&, ' *"!%' 8 "+!: &' !%&' ,) ' * &(!%& ' &!: #+' (#, ' !%&) ' .&E ' 8 &E 8 (7!&, '!' <-< (' 4 ' ' ' ' ,E / ! ' @6' %& +&&, +' (& !%: +' "# & J ' !' 8 (7!&, ' !%&' +!(' %' .&"#/' '%(#/&, "#! ' +: /(

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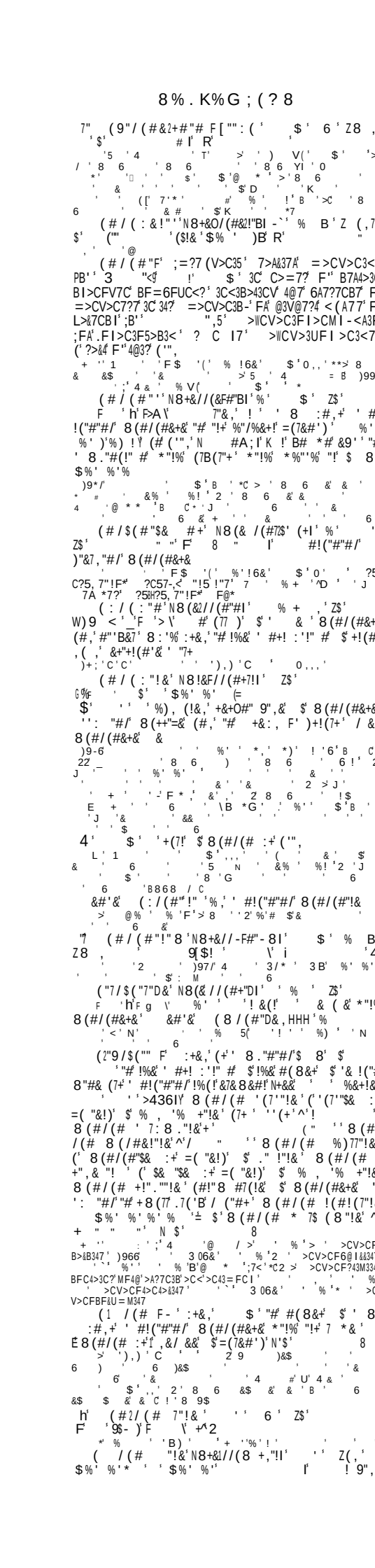

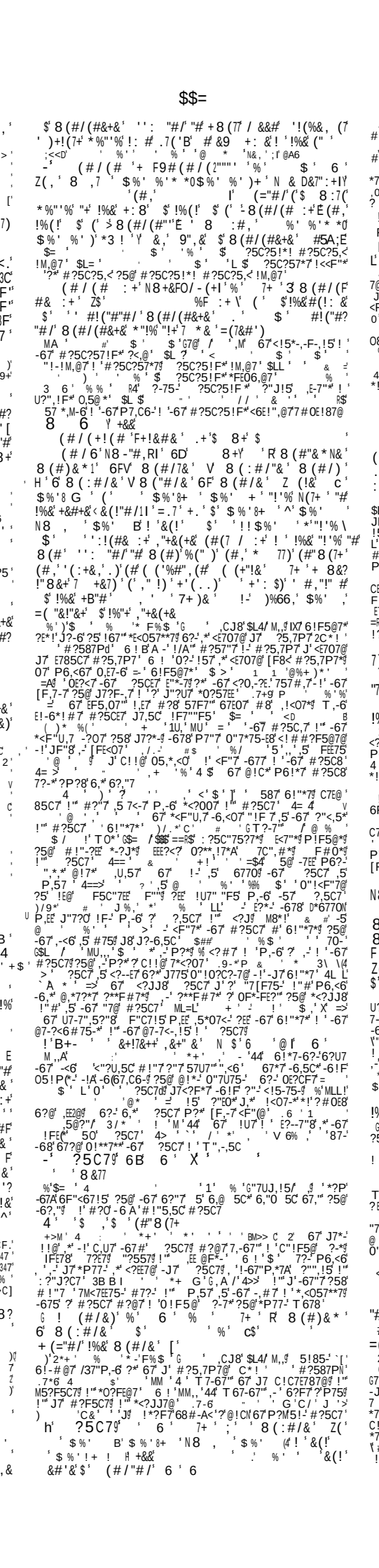

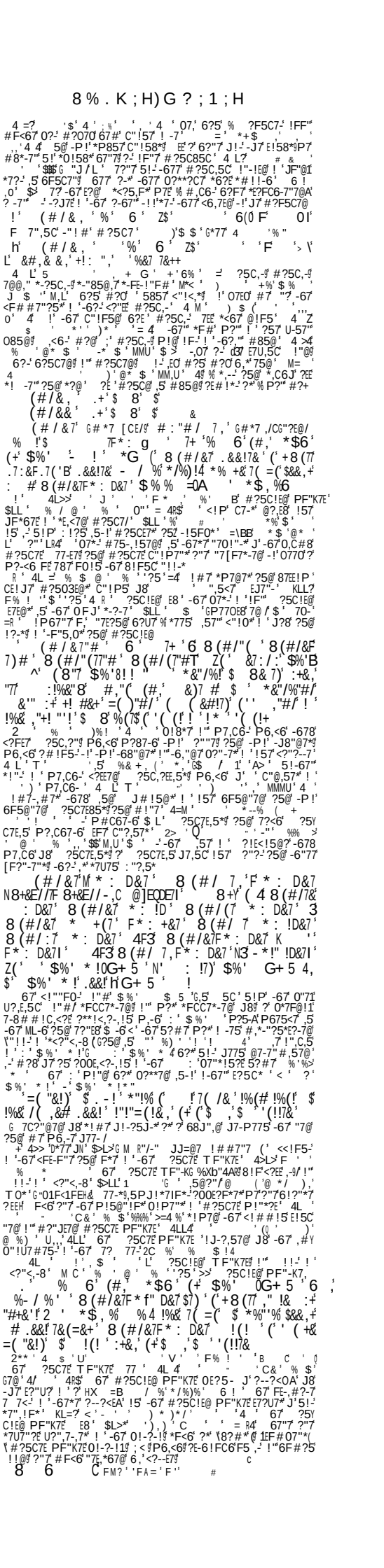

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I7<- 'P!F@',5-!E7"?J8@#?5CE7'#8' <67#7' $>=L > '
T '$ML / ,E ' : !'-!'?5' -?E,?5' !07"?:?5@ 8!F'P,EE 67?:"GJ7*,5C7"*!' <E,0'?5@ #?5CE7-67,:"P!'@*9-6?- 8!F'P,EE E!*7 7U75-67'E,--E7*75*7'-678'<!5-?,5')96* ? <+) ' ' ' ,''' $ * ! C,U7 FO !F75'?5@' !"@7?FM P!FE@ 7-!' #?5CE7 "?5<7' $' $ & ' +$'4> 'FE8 4,RM T 68 #?5CE7 ,"C,E P,-6'7*-FO,@'16+<' #!"-?E,? -?5CF5-1' % * ' = 4 & 'FL, '$'U,' T O*'$L $ %%%' 444 *<6,*#7 02"-7@ -67 <!5C"7C?-,!5* J7 !"7 5!P' ,-' "75-' ?5@ #?5CE2@ 5!P' ,-' "?C!@

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& %' (' : ' $%' '^' ' %' ("
$' * ' ' &++' +8 !% *"!%' (' 8(#/7&
667 :' +//' %' B'-!'*#!!-6'E,575'J8' #?5*#!' ' #?5CE7' ,'5 6 !' 6)) '@% ' B' C %) ' B'7-< G$L / $ '#?<6,57#!"#?<6,57#!"#?5CE,5C?5@P?*6,5C 7U7"8?"-,<E7#?@7 !',E,575'D7-<N-6?-P,EE 57?"P?*6,5C ' %' *) ' 67 !@7E!' !' #?<6,57 !"" ?5CE,5C ,575' + +' - '! !' * ' $' "*' [F?*6?#'@7*,"7@ 67"6F#JE7GEF-8!?5@6?@6?@-67#E"D"<' <E!-67*N #?5CE7@ ?5CE7' -67'@ ` '7M<E?,#7@ 0!5C7' '",,E' #?5CE7 7U7"8'J!57,5'67"*0,5')9*6 ' '@)&G' 3 8 ,C6-6?U7 C!-' FO'#8'E,575?*' <?*#7?E!5C ^ [F77" -6,5C-!'6?U7,-' #?5CE7@P675',-2*!5'!57 @' ' .&(!'N7&(,!'$7(!' #(' 7?& MLLL!' 0 ' &%' %!' ' 67' 0"!<7*" ' #?5CE,5C DE7?@N <!5*,*-*,5" !EE,5C-67*677-'-,C6-E8"!F5@?'P!!@75' #?5@",E9 J7?-,5C',-#7?5P6,E7?P,-6'-67'OE#J7"2'#?EE7-
(#/7&,'N8 8?"0/7,I'//' (!Z$' 'DH f h'0 '!'Q #'+&#+&#' $'!%&' =.
> ' 3 ' % ' ' ' *2 7-' $'5!-? *6?#7@ -!' 0,<O7 !F-' <7"-?,57 #?5CE7@*75-75<7*')7/-' J & '%' :75' "7 ' :U' 7' #'?#25CE7@#,5,*-7"P6,<6'78-67"*-7?<67-6'P7EE',"E,F7-6'7F,E9!" F7-6'P7E?5@ -7?<67-6'7F,EE')/E6 ')*+ ' 67*7'DJ,"@*N <?#7,5'@77@ 5'-67,"!P57#?5CE7@ ?"O?*7*-!'77@' ' 4 ' $%! == A'$L 4%%%'4 ' 67'#?5CE2@0,7<7* ! '?C?*62-! 7"075-! +>>' & " " ' ' 'C% *' ' % 5' $4' <<!"@,5C?*-67' !,<7<!#7*-!'-67 ?"$,5-,"7 !"#?5CE7@' + ' '8 ' + *'$$',M' 67,"O!!"#?5CE7@ <!#"?@7' ' ,+' + ' ' "7 '$' '#F6-,-F@7!'*O"!F*9 #?5CE7@ 0FJE,<?-,!5*!'-67 ' *-' ,' + ')66+ 8 ' ' ' F+ %>* %-!!O 6,#' $'-67 6?5@?$@ 0!,5-,5C -!' -67 #?5CE7@?5<6!"9E?FC67@' ,9-' (' '$ ' ' '

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' $!' -6,-# 7E# F"3@ !'" !"7"F557"*9 *75@*# ?5,7 ?5@ 6"75K,7 -!' *FJ! #'7 67'" ",75@*' $=4 ' # 9 %' B ?' @,*7?*7 ,5' -67 67?@ <?E2@ #?@57**7 (#"& ' U2*"' ' # ' 8 (#)' .+' $' ' (#"& ' .+' $ 8' $ #) (8 & * N& ' .+' $ 8' ! ' 6B (#"$(' ! : & ' .+' $') ! ') 4 (T#"$&+!' N80&#"$&+!I' 6' Z(' $%' - '=.7' *J 9' $%' - ' ! (' $' $%' 8 *' / ' !' $%' - *B $ +"8"7(' $ 8(!" #' !% : /% (' '", &#!(77)' "#"',"#/ "# $ 8' *"!% !%& (,0 \ $' 'W ' 8(#"$&+!(!" #' "#, "' (!" #' *' % ' $ =$ ' 2 ' % ' (' ' $"$U ,' V$' 7',F@C7-6' -6?-' #?57"' ! '*P7?",5C -!' J7 ?' #?5, 7*-' % +$ ' +$" ' ! ' #?5, 7*-' ?E, 5C "! #' 6,* ?E,7C?5<7 ' = ' ' ' # ' ' C & '($LL / J' L' !' "7*-!" .5C @F7 6!5!" -!' -67' @F*-' ! ' -6,* !"@ !J7"-9 % 0"7*75-' 6,* 0!*-7",-87' P,-6' -67,*' -F7EF7 #?5, 7*-# 67"7! $= ' ' ' ' % ' ' ! !',C,U7' *! #'7 #?5, 7*-' ! ' ?' @7*," 7' ! ' C ! !@' -!' -67' 07"*!5' P7 ?"+' ?5C"8' P,-6?E' $LL ' ,5' ' + ' % ' 9 L > ']F<6'?' P",-7" #F*-' J7' IF@C7@ JI"' 6,* Jb OZ -67' 0?"I E' 7U,@75<7 ! ' 5!' ?**!<,?-7 <?5' P7,C6' ?C?,5*-' 6,* P",--75' #?5, 7*-']"7' ?5' ,5*-?5- . ,7"# '7(8(!" # ' ,&'7((!" #' (# &# +!(!&8&#!' (8(#"$&+!' 6 -=.L') ' $ %' * + ' % 'K F-' !'" <-.!5*#-62-' ?"7 JF,E-' UO!5' *F"7 ?5@ *!EE@7 C"!F5@*# G*F<6 ?*# 6,* ?,7*-,7* ?"7/9 ,-' J7E!5C7-6' -!' -67 #9 -!' J77 0FJE,*67@ J8 !075' #?5,Y 7*-*' $=' $ ' ,5' F*6P' ' * ' ' ' ' ' ' ($= 4/ ' L' 8 7067P9 -67 "",5<7' E7<-!"' ?E?-,57 6?-6' @7*,"7@ # 7 9-!' #?07 ?' ?5, 7*', 5' #8' ?#7' $=:> ' B ' !' $4# ,* "!<?#?-,!5* ?5@' ?5, 7*-* ?C?,5*-' "!06?5757**' ? ' ' * " % ' 67"7' P?* 0",5-7@' ?' ?5, 7*-9 *FJ*<",J2@ J8 -6 ' ?"',5?E ! ' !F"J!5 ?* 7?@' ! '-67' 7?CF7' $A' $ ' % ! ' ' > ' F-' 8!F9 ?F-675-<0' T ,-5?**?* % J",5C9 ' -6,* #8' ?5, 7*-' 6?-' 57U7" #!"7 6,* ?5@* 6?E<! #J?-7 !5'-67 <"!!07@ 6!"7' -* ') @ ' ' ' L4 -7"" 6?U,5C E?,@ -67 & F 7E(* ?5, 7*-' J7 !"7 -67 **7 #J E8 9 @7<E?",5C 67"" 7Y *,C5* ?A 5*-' 25?@?' 5>?@ ' ' ' ' ' ' 00' L4 A F""?8 ?5@-67 !-67"*9 0FJE,*6,5C #?5, 7*-* -!' ?E?"#* -J7A50-,!5 ' T7"7@,U75 '!F-' ! '-67 0,5C@ ! # M ' %& 7"+!' $(' (/ "+"/#& , .)' !%& 8(+!& ' !%& "#$ 8(!" # (#,' :+& $ $$"' & +' $:+! 8+' $> ' G7@' %7"*78/9 ' %$ - ' G,5 %--)&-' ? "?FC6-' ! ' ?' ?*-?" ! ' ?' 6,0 2* ?"C!9 *67P,5C' P6?-' .*' @F7' -!' 6,#' !'" "?,C6-' "!#' 7U7"8' 7"*15 -!' P6! #' -67' : !!@*' ,5' 6,* 6,0' JZ"!5C9')'$> ',5' ?5P?8' % ' G$>=4' %" ' MM,' 4> 2,267 *?,@ <! # #?5@7"* '*6?E' * #?07 !?-6 -6?-' *F<6 'C!!@*' 'P7"7 ' AF-' !5' J!?"@ '?*' ,5 -67 *?,@ <7"-, ,<?-7 !"' #?5, 7*-' *' #7 5-,!57@' ML!! $U) ' $ $ % ' % $ ' M,U ' ' ! ' ! !@*' *6?EE' J7 ,#0!"-7@ ' F5E7*' -67 ?*-7" ! ' -67 7**7E 6?* !5' J!?"@' ?" ?5, 7*-' *,C57@' J8 6,#*7E9 <!5-?,5,5C -67' 5?#7* ! ' ?EE -67 !"-* D7-<' $LL ' % ') 3% $ ' M ' ?"' R=' -67' [F?5-,-,7* -F"57@' !F-' @, 7" "! #-67' #?5, 7*-' J8' !57' 6?E '0?<0?C?9-67' #7"<6?5-',* ,57@' -67 *6,0 ?5@ ,-* <?"C!' <!5 ,*<?-7@' $L>) ' ?BE > ,) '<' LL' <67@' ' F<6 ',<7' 5!-' J,5C 75-7"7@ !5-67 #?5, 7*-?* 0?"-' ! '-67 <?"C! $%'8 *' / ' !' $%' - *B $' ?&(7) &=&(?&,' ! ' !%& &)&' 8"#, ' '0 : , /&? 8&#!' &# ! '="& * ' ' 8 &%&#+" #' .=" :+ A)' >' & ' C* ' '0"' + ' 2 G ?#J9 / 6?557 ,* -' #?58 7*-' ?5@ ! 085' 6?-' J8 -67 C7-85C7 ! ' @.F,5,-7 #75 J7 5 #?07@ JE8* FE')' $ ' (' *G %' 2 ' ' ' 57,@,* 5!<6-' -!' "757P7 ?EE #85' U567E?@ 75' ,-' P?* #75,' -!' A!F" #85@9 ?5@ #?,@ #?5, 7*-' $ ' ' ! % ' ,' KL 7 ,-' 05!P5? ?5@ #?5, 7*-' -!' !F"E!"@7 -67 085C7 9 -6?-' -67 E7P7*' J7C8557 -!' JF8@7 ,-' D-67 <,-8 ?C?857' $ A' ,5 ?QEF8-' @*, '% 4=4 67' J7--7" ?5@ ?E*!' #?5, 7*-7" -7*-, ,<?Y -,!5' ! ' -67' -"F7-6 $ L$ ' ' ' % ! ! * ' (' ' G ' * ' J 6"77 5,?58 7*-! E87* ?J!F-! 57' 0!!"7 0E?--7" $=$ = ' + ' ?-! -67 P!"O* ! ' : !@ *6!FE@ J7 #?@7 #?5, 7*-' ,5' 6,#')*' 4 %$ * ' > 67?* C!57 9 ? #?5, 7*-' 7"075-' J8 67"*-,5C' !E#!@7-67 085C7 9 -6?-' -67 'KI' 67 <!5-"?" 8 ,* *!' #?5, 7*-9 -6?-' % <?55!-' -6,50 8!F ,5 7?"57*-' $>$1'-" @* $ (' + ' \>' ! F #' -6?-' ,* ' CE7P8,5-67' !F-6!P ,-6!F-' #?5, 7*-' ?*-7' $L >! % ' ;' ?3< ?&@%) * ' S" ,-* ?' #?5, 7*-' ?5@ U,* JE7 "!" K) F %)' ' ' 4=' 5' #?5@ 0E?<7* -67' #?** *6!P7@' #?5, 7*-' *,C5* !' !E?-7"?E 0"7**F"7' $L=>' T ' , 4 # ' '@%+ '$ ' ,*7 ?5@ J7 #?5, 7*-9 !' "1,5 5C' -?"' $'4' (="#/ &=" ,&#! +"/#* *-= &=" ,&#!7)' ++&++&, *-*3 / :"7!)' Z $!& ' !%& (!"# ' ##! :'!" # *"!% /&#"!"=& \' 6 $=L$ ' ' 6 'B')& ' ,'4 ' !P9 #?5, 7*-' !'<", #7* <!-",U7@ E!5C *,5<7 7' *-!!@ ?' J1E@ @7 ,?5<7 P,-6' 6,* ",5<7' $> ' ' @% ' B') ' ,' =4 ' ?E,*-!' -67 7M<7EE75<7 ! '-67* *07"7 *!E,@7 ?# !5C7* !-67" 5!JE7 <!5<E*,!F5*9 *6 P8-6' ?5,Y 7*-7' -67 @,F7"*7 ?**75<,!F5* ! '*,C57* ,5' @,F7"*7 0E?<7*' (#"$&+!' G# ?7 5, 7*-/9 ' 7+ ' # ?GC/58 ' $&+!' Z(, ' $%' - 0 ' $%' - 0! ' $' $%' - 0+ 'N+&& &' ! ' $' ' / $%' - % ' - $%' - % (" $' % ' 8(B& &=",&#! ! ' !%& &)& ' ! ' !%& :#,& +!(#,"#/' ! ' +% *' 7("#7)' ,"+' 7 +& &=&(7)' $ > ' ' C* ' 5)' 0"' \ ,' 6,5075' 87' -!' #?58 7*-75' 8!P"7' "75!F5' ?5@ @ ! ,A ! P" 7 5?#7 -!' J75' J!#' !"-6 ' $ L ' ' % *' \ ,,' G ?#J' /9 6,5075' 68@@7 ' !-6 -8#7 JF-' ? -7"P?7@ !" @7*<!F7"7@ U5-!' 67"" ?EE7 6,* <!F"?C7 ?5@ 67"-7' $ L' & ' +%' % ' J $ '' > ' !' #?5, 7*-' #8# ?0@ ! #7 -!' #FE-,-F@7 ! '07O,EE' $ L? '2#2' G%67 #' :* ' ' ' ' ' ' 7' #?5, 7*-7@ 5+> ' #?5, 7*-7@ !"-6M 6,* CE!",7' $ 'L, ' ' ' ?' ,U' U, ' ' 67' #,"-6 P67"7! '*!E?"@7@ P,-6' #8' #>-7"9 6?-' 5+> ' #?5, 7*-7@ !"-6M J7' #?5, 7*-7@ T,-6!F-' -67' *67P' ! ' J!-6' $= 4 4 ' ' * ' *(' ,U' ,,,9 T 6!",*7-6' FO' -!' #?5, 7*-' 67" CF,E-X' +>M+' ' ' * ' ,U' 5' -6,* P?* #?5, 7*-7@ -67 !5?E 4 ' G,!@' -!P?"@* U*' $=44 $: ?* ' ' %' B * C 1 > ?67 *F557* ",*.5C' #?5, 7*-7@ F5-!' F* !F" 7"" !F" $= ' ' + ' ? ' ! ' ,,' BM>><C T 67-67" -67 <-' P7"7 !07"?-,U7 !" @7<E?"?-,U7 9 <"7?-,5C 57P' ",C6-9 !" #?5, 7*-,5C' !" "7*-!",5C !E@",C6- $> = & ' ' $' ,, T O*' 1 * ' A # ?5, 7*<* 6,#*7E' -!' F* F5@7" -67' <6?"?<-7" ! '? ",C6-7!F* C!U7"5!"' $L $ 4 # % ' ,U'] ' KLL' ?-F"7 # ?5, 7*-* ,-*7E '-!' F* !5E8'-6" !FC6' !F" *75*7* $L> ' 4 * ' ' ' F * U,,, 4M ' 7' <"7?-7@' !F" *!FE* -!' # ?5, 7*-' -67 E,C6-' ! ' ,* ,#?07 ! '?' *5,5*-?5<7 67 #?07 ! '?' *FJ@F,5C ?5' !-67" 07!0E7 *6!FE@ #?5, 7*-' -!' 6,#' -67 <!5-"?"8' $L ' ' ' ' ' '

8 % . ,N / H@

@,5!?*' -67')5CE7 ' ,L !' / ' ' $ ' ' ' B' 67' <6!*75' ?J*-"?<-,!5' P6,<6' C?-67-"*' FO' ,5-!' ?' !<F*' -67' #?5,+' !E@ ! ' 6F5F-5' @F-8@ 7M07',75<7@ 25@ 6107@ *0!? < ' - ' <-' =' 67' 0,<-F"7F [F7' #?5, !E@ ! "E, 7@ , ' % ' + ' 0 $L ' ,5' ' + ,' ! ' -0!*' ' T ')(($$' 5' '), ' : ' , ' ,5' ' ==B$' ,7#?551* P!"O' <!5-?,5* -P!' F5@?Y #75-?E <!5<70-,!5*@ <25, !E@ ?5@ -67-2' ! ' 7A #?5, !E@ ?5@ -67-2' ! ' -67' #7?*F"7 ! ' <F"U?-F"7 ! '?' <!5-,5F!F* #?5, !E@ 0!**7**7@ ! ' P6?-2' 67' <?EE* E?-57** ,5' -67' * #?EE7*-' 0?"-* ' 15<70-,!5* ! ' #?C5,-F@7? J7' 7M0E?,5*? ?"7' !5EU' 0!**,JE7' P67"7' P7' 6?U7 (' C757"?E <!5<70-,!5' <?0?JE7' ! ' @-7-" #,5?-,!5' ,5' U?",!F* P?8* ' 67' #?5, !E@ <!5*-*-* ! '?EE -67*7'U?",!F* @7-7" #,5?Y -,!5*@ 7?<6' ! ' P6,<6' ,* ?5' 7E7#75-' ! ' -67' #?5, !E@ ' $? ! ' ' '

/ +' o '@ %' ' / 'MMM,,# 5' -67'7U75,5C'! ' -67' -6,"@ @?8# ?*' -67A' P7"7 *# !0,5C' -67,'" ?5,,E?' <67"!! -*' $L L' (( ) 'VA"T' %! ' %' % B' 7 5? # 7 !"' ?'0,5@' ! ' <67"!! -*' # ?@7 ,5' -67 6,E,00,57*' K 3 (' ') # ' %' 6, ' %' E ! ,' % P,E P6, '?' *?@ ?5,E?

(# "77&' N8(#"E7I' % ! ' 8+Y V 8 (7F N7I"77" ' 3 8 (7 (' 4 8 (#"7N7I" ' 8 (D,77' 4F 8 (#'7, ' Z 8 !?)' (' $% %B ,"8' $' $%% ##&,' "# !%& +(8& +&##&N ' $& #' $' $%*' . (,I \' # O: (, "77& (#,' 8 . &' !%& +&' #,' .&+!' ! : 8 ' % # : 'N .&"#/' !%& ,&: '& $ (' .7('B +:"!' 'I%& +&=&## $ (&,' +:"!I

40E1' ' * $ / 'F % $ 'G$=L /> ' -67' E?<O'-67"'7 ,* ,"*-1 -67' /%! ' !"' <7' ! ' ?@7*!, -67' % *' !" JE?<O' 7F<7!$ -67' C% *' !"' <7' ! ' EFJ*' > ' / 8 I ' 8 # R' *' % ' 7J ' 6?@' ! '-75' -P !' JE?<O' ?<7* P,-6 !F-' ?' #?5,,,! ' >,? ' ! % / *)&',,, ' $ O?' @,E,,!' ,"*- ' 7@' ! ' -P !' <?0-,U7 -"F#0*A' ?5@' *P70-' -67' J!?"@' ' *' # ?5# !"7 ?5,E,,! !"<(@'-!'8,7E@A' > / *' B' ' ' % ' '?!,' 67' #?5,EE?' !"' JE?<O' @7F<7' ,*-67' *7<!5@' D-"F#ON' K K)' #0 ' % ! '4=-' 67' *7<!5@' ?-?@!"' D?-' #J*7N' ,*' <?EE?@' ?5,EE?' !"' ?E,EE?H ',' *'-67' *7U75',5 ?*"7@*F,-' ?5@' -67' @7F<7',5' JE?<O@-67' *7U75' J7,5C'-67'E!P7*-' <?"@',5' "7@' ML*M' # ' +$ ',U' J!F-'?*' # F<6' -,#7 ?*' E?@,7* ! ' -6?-' ?C7' *075-' !U7"' *0?@,EE7'?5@' # ?5,EE7' L>' ' ' ;,67" $6 ' ,'M,' 5' ?E' F,-*' P 75"' "F # 0*' -67' E!P7*-' <?"@' -?07*" "?5O'?*' 7<!5@' !5!F"' ' -',*' <?EE7@' ?5,EE7

(#"77&' 8 (#"77"(' .+' $ 8+' $' ' =' (#"77" ' .+' $ 8' $' 6' '

(#'"#' !%&' 8 # $' %&$(#"'&,' +&8 .7(#'& $ (' 8 (# N ' (' 8 (#Z+ $(' &/"# !%&@ ,"+B $!%&@ 8 #' =& ."(7 % ' *' $* ' %'' $%"' ' $**'

+ !',5 A",C6-' ')'@' $4 !5' 5' -67' # !57 *-!5@ ?5-'*-"-@!5' ,*'EA-' J"07',*'JF"-675'67'J7"7-6' %'$ A' * ' ') ' ' ,' 7 675'-67'[F757J?@'67?"@'-6,*"75@7E8' #!<,!5 GP6,<6'P?*?*2' ?"'7 "!#'67"'-6 !FC6-'?*-67' # ?5' -6?-' -67"F@7' ' *?E7' ,' ,5' -67' C' M*=*' C' # $ ' @) 'B' / B 84 4 'T 77*?8'G5!'-6+'P!#?5/-67' # ?5'-5' -67# !57' *-!5@7 #!"7 #8'0,5*#?5 -6?5' -67' # ?5',6' -67' # !!5' M=M!' / (' *7#0' , '-'$ H' % P?*-67' ?5',-61' !57!' P675'-,#7' P?*' 1=>2 4 "' $ & '$4 T 6,<6'67'05!P*5!#!"7-675' -67' ?5,5'-67' !!5' AV>*?' '8 ' *',%)&'G$L /4==$' -6!FC6-'5!#!"7 ! 'J7,5C' (6 '!'J7,5C' ?' #?5,5'-67 # !!5' L' 4 %'@*! 'GN -/@C/44> F+$' 675'8!F @!5(-'05!P'6!P'-6,5C#?"7 *7--E7@'X ,!' !'#!"7-6?5'-67,# ?5',5'-67 #!!5' % + ' $-' ' * '-* 'V '$$U' 68' T, 7',*' ?' !5*-7EE?-,!5!' ,"-F7*H *67(*-67' !!5!?5@'-6!F ?"'-'-67' ?5',5'-67' 0!5 4' &&& &,'! ' (+!%&!) & $?5',# ?C,5?"8' & + # ' 5"7<75-!F*7!?'!!<FE?"' 5?#7' !"'7 0"7-75@7@E8' F505!P5 07"*15!P6!*F00E,7*#!578' !",EE,<,-*7M075@,-F"7?-'7E7<-,!5' $ A' 2 '%8- * ' J %! 'B Z'G:"!*?"-/ ' 1>',' * ' ' ' + -67"7(*' 5!' *F<6' #?5'-!' J7' !F5@H E7-' -67#' -6?-'6?F7-'67' ! # #,**,!5' !"-67' !5<7?E#75-*E!!0J7' ?-"' ,-!' !"-67' ?5',5'-67' !!57 0F-' < 1,-' K=?K') Y $ ' $' ,+' '4 ' -',*5!'5!' P' *F ,<,75,-'6-2'-67' E7P7*'J? 'J7' !<!5F7"-7@ F-'-67*7' b i35F7"-7@E7P7*' # F*-' #77-' !F-' ! ?E-' ?-,!5*' -67'-75' "J7*!?*' P7 '?*' -67"7*-' : !!@' !@ P6?-' ?' ,57' 07!0E7' 6?F7' P7' 67"7X' 75',5'-67' !15!?5@'-6!F ?"'-'-67' M >>' ' ' 70-' AL R$' D, 67' P,-57*'N' <"7?-7@' *!' # 7?#F,7, '65?' J8' 6,*' #*<' ,"-F' ' F#9'-67 # ?5',5'-67' #!!5 P6!9 J7*?,@9 P?*' ?'67<7,*?"8'<!5*7[F75<7!' ?' !-57*' 7E7<-,!5' K E B 3-') ' *$ B' ' !-* ' 57 ! '-67' ,"*!-6,5C*' "' '*?,@-!' #7 P?*!1 !F'05!P' $?#'5!-' ?' 1!#?5',5'-67' # !!5'm ' $?#'*,#0E8'<!#7-!'*77' -6?!-67' # !578',*#05?-' 0"!07"E8(' ,LL?' %'!% !'$' '?5' R4' F5@"7@*' ! '6,C6E8' "7*07<-?JE7' ?"E,?#75-?"8' ?C75-*' P7"7"??@8-!' T,5D?!-67'0"*75<7!' -67'1 ?5',5'-67' !!5((#" ''N8+-1#" BI' 8+Y (6F3' 8 (#"% ! V 8 (#) !' 8 (,-#" !' " ' VF 8 (#,," ' ' 8 (#" ' ' NV 8 (#) '8 (#," 0 &'48 (#" 'B'3'-"(i# 'I V' V 8 (0,"% (V' 3 7: (#," ('3 8 (#" N'I (' Z & ' : "$%' ! *)%B :((#' $%' ! *' *%"'% ,&E # !&# !%& !' $!%& 7(#!' !%& 7&(=&+ .&"#/' ('7!&,' "# : " /+$ * %' !#& +!(7B $%' 6% ' $%' V' (#,' !%& 0:"'& $%' /+ % N : ! # %' ! ' *-' C %5 ,' >463' F5R>I

67' !"#' $ %' &* ,'?@!0-7@',5' J!-?5,<?E %R' ?*-67' *07<, ,<5?#7? ?00?'?"*-!' J7'?" "' *07EE,5C' P,-6' *,E75-' R<' 67*07EE¥ ,5C' $ %' *)&' !<<F"*' ,5' "' ,5' $=$' G E?F@7' @(JJ7U,EE7 *' ' ' % % ' %' 44 / ,

%& 7(#!' ' ' O =' N/&#:+ %' * ' $? 8& 7):% */ !4' 7+ ' !%& 8&(7 8(,& $ 8'!

7' K*LL' -' -"' - G-*+' !' J * ! U,,,' 35' 67 #7",<?57*#?07 #7?E7 ! '-6!*7 "!!-7*-6?-'?"7 ?E7@ ?5,6!-' '* %>RR4!' ?5,6!-N' ,=M,' C* 0 $ +!' % ' ' -' + 'RA' !!-7*!' "?* 7'<?EE7@' 80,' ?5@ ?58!-' g634 8 * ',M$' 67,"',7E@*!' ?7*"?5@' ?C' 5,!-' $>=' ' ' *!'C* 00 $L' ?5,6!-',% */ %' '0 ' D*77' N' MLLK % ' * ' M 7<$ 5HR' '*07<,7*" $ #?5,6!-$ "!#'P6,<6'-67<7?",'"FJJ7"P?*!J-?,57@ K))F' / ' -"' ' C % ')(') ?5@,!<?' "!!-',*' -67,"<6,7 7*-'@,7-$ P67"7!' -678'#?07'E!P7"' K=== ' ' $ ' o ' -"' ' % 66, ' ' '*# ?EE -"77'<?EE7@' ? a' 8!<$ J8' *!#7 ?58!-$?5@ J8' !-67"*' ?5@,!<' *' ' 7" #75-7@' P,-6' '# !E?*7*$ ' (' + * % ' '$ 4 6!F',0,C6-7*<' 6?U7' E,U7@' *!' P7EE9 -6!F' @,@*-' P?5-' 57,-67"' ?5,!<$ 5!"' !-?Y -!(*' V>L' ' ' ' %,' %' ' ?5,!<$ P6,<6',*' E!!O7@' 0!5' 67"7 ?*' -67*-?' '!' E, 7' $L>$ * % ' ' ' % *M8,$' 67' ?#!F*' ,?**?U?$!"' ?5,!<$ -67' !E@' !!@' !' -67' 5@,?5*$ 67"!!-*!' ?51 @,!<?' 6?@' ?E#!*-' O,EE7@' -67#' ?EE$ JF-' J8' ?' 077<7' ! ' 5

<!#7*6!#7'-678'P7"7'0"7*75 <@') / /*' # ' V -' 3 / % '@' *' 'U'V4M 67"!!-' ?5@,6!<?$-6?-'?U7'8 0!-75-' !,*!5')9/*' ' % ' $ %5*' ' M'G$L= / 4' '*FO7',"!"0,5@' !'#?E*,*' #?5F ?<-F"7@?-' C?' !' -67 *P77-' #?5@,!<?2 %' *' ' / 4' ' % ' G'4' 7J' R$' 7' !F5@-6!F*?5@*' !' ' ?FJ?'?5-*' <?58,5C' !' 6,*'-!"7 !' #?5@,!<?

' % 6, (+ $%' *) 6 %!' 6+ '- *+ ' $ % /%) ' / %' ' / %' % *' ' ** ' G* $ M> +' < $' + +$' $$' 44' 5' "?*,E7? 7,-67"' 7?-75' J8' -67 #*7EU7*9 !"' P,-6' -67,'" ?5@,!<? E!P7"' $>>> T' ! ' A ' $ ' ,U' > 67' ?"-' ! '7M-"?<-,5C' ?5 ,5-!M,<?-,5C' E,[F!"' "!#' #?,K7' !"' -67' #?5,!<' "!!-' $> L' 4 ' * ' % ! 67' !?-"!0E?5-' *B ! ' ' ' 'L ' P!"#9 P7EE05!P5' -!'D T 7*-' 5@,?5N 0E?5-7"*' ?*' -67 ?5,!<' !"' 5@,C!'P!"#' + +>' & #' ,5' < ' ' ' ' ' > ' ' U7**7E E?@75' P,-6' #?5@,!<' E!F"' "!#' -67*!F-6' &@*' % 'C* ' %S!' ?*Y 4' 6,*#?5,!<#?7?E' ,*' -67*-?0E7' !!@ 4 5 #' J ' -)%' (#" #' 20'++ ,'*' 4Y +&& (#" (.7&'& #' $ 8' $) $ ' (#7 &'F * &'F)Y +&& # ' (#" 7&' N8+&&#' 17I' 8+Y NL;!' - 8+#(F 7&'68 ("#" :7'8 (#) :7&'8 (#) 7&' 8 (#"F 7'V F :7'VF4'F :7&'NV 3 8 (#: 7&I'6F 8 (:"F 7&' Z(' $%' ' N8 &' 88 #7) $%' /+ ' (+ "# 8 , ! ' (, ' $%' / 0+'%(#,$:7' ! ' $+ 7,"& +'$' $%'+'%(#,'H EHHF'*&(B$ 8' $! >/ 0! ' $"77 N(+' / '+ '$:77I

5' #7@ ' $%' /+ ' P?*' ?E*!' F*7@',5' *75*7' J7E!P' 75*<67E#' F ?5C7 6?"*7U7"?E,*!E?-7@,5*-?5<7*#'P6,<6 '%' /+ ' ?5@ -67"7E?-7@ $%' /+ %' *77#' -!' 6?U7' #7?5-1*!#7-6,5C<?"'",7@ ,5' -67' 6 ?5 @ -6 7' E?--7"' ,*' ?00E,7@' -!' ?' P!"O#?5?*-1!$ GX?' -"!P7E?/ X?*-?? ?5?0"15'H -67' !"#7"' ,*?00E,7@' -!' ?' J!P$! '*!#7 0,5@' 7@' ' ' '

8 % . HP

"7*< ' -J78#' A$ ' ` ' *·'Ł,,' ' 7' P!Ł@7' C!'
85@7 -67' #??" -!'*07?O7"P,-6'Ł,75
h'$ ' ' 8 : +"' (7 8 ,&' = $ * ! = 6 % b^B
Ł $ Lґ 1 # ? ,%))) + ' 'ME,U' ' 5'-67" P,*@? #' *7<675@7' -67'
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*7Ł ' "70"!?<6A' !" ,5*F ,<,75-' 0"70?"?-.!5' YV+ *(
% ' %''U,,,' FEŁ' 1#?557"(* 607' 67' -75@7"7@ -67' @"?#'
$L ≥' 'B C >' 67' <6?"?<-7"' ! '-67' Ł?-7"'
D 6?F<7"N?*?'1#?557' 0?,5-7"' $>$> =' ' ' ' + $' '
' 6?F<7"§' P6!*7' 5?-,U?' 1#?557"* 0?,5-,5C' U7"*7' D7-< N '
$> ? ' 4 &_" ' #F %, ' ' ' ' 'V' ! ' 2 ' 67' ,?557"*1'
0?,5-,5C' ?5@' ! ' !C?"-6 ' $>L=' & ' ' ' *' ' ,, M,M§
' -?FC6-' -68' #?557"* 0?,5-,5C' *-"?,5*§ 67' E!U7*§ -67' P?8*'
! '*, #OE7 *P?,5*')66/' 4 : '-"' %$* - >' + %! 'U,,,'
G1>>L/ =A' ,*' "?F@ FŁ ,?"-§ -6!FC6'U7,E@',5' @770' @,*CF,*7§
6!5? J",C6-¹ -!' : ?#?(*'1#?557" 0,7"<,5C 787*
7(: # & ' B'Ł +&&' 9 " '
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)'$ = ' ' ' ,, ' & ' C &' + + ' # ' 5' ?' #?57"?JE7 #7" '
*6?EE7 N37 8 6?F7 C75-FE7 <67"7' ,-' C8@85C7 ' #?57"?JE7' + >
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0' ' 0' *+ 0' +! 0' $ / 0$ %' ' !(
$ MM # T -, /
$ >≥ 0 '@ ' 5' 4 ' 5@ 7@7',*' #?57"7@? -7"'
68#'",A-7?*O85@7?7M7-6')'$ A' ? ' ,*' ' ' *+' ' ,G *' '
' ** ' 7',* 5!·' #?57"7@ Ł,O7?'C75-8ŁŁ #?5' $A '2 $ '
@ $6 * U' G$L $/' $§' 'Ł,5@7 7#J"!O*67"7' -!' J7
P!"*-' #?5"7@*F5@62"@7*-' -!' ,5@NHA"Z!5?JE7' $= L' : '
@ ,5',Ł' $>' 7*77<6,5C'8!F' -!8AA7'67" ,"5<7Ł8'-"?,5,5C@
-6-' *67' #?8' J7' #?57"7@?*' *67',*' J!"57' $=>' ' "
6 ' ' ,U' $ >' O7!OEŁ7 @, 7"75-Ł8' J"7@ ?5@#?5'
57"@' "!#'-67' "?@7"*' +' # ' :+%' ' 'ME,§ 7'P?*'
-67 #,Ł@7*-' #?557"@' #?5' 6?-'7U7" *<F--E7@' *6,0' !" F-'?'
-6"!?-' $L >' '4 &' ' $' ' 67'
#7",<?5*?"7 J7--7"# ?557"7@'-6?5'!-67"§,5' ?*' ?*' ?*' -678'
"7U7"75<7 ,5-7EE7<-' #!"7-6?5' P7?E-6 ?5@ ?*6,!51' MEA ' : '
4 ' 'F 66 ' ',M' + ' 7' P?*' P< bJ<**7@§
?5@# #?557"7@' O7 ?' C75-E7#?5' + ' ' ' ! ,$
%%%' '4 ' 67' #!*-'*P77-E8' #?557"7@' C75-E7#?5' ?Ł,U7
! . ' $'(7"!& ( )' , : '!" #Ł Y 9%". "!"#/‹ 8 (#?
#& +Ł ! '%(('!& ' N $' ('&' ' $* %0
%7+ ' ! '-%6+ % 4' 6
> '< ' * +! '4$ 'ŁA 75'O5!P'-68*7Ł §-67'6F#?5'
#,5@ *F"U78 75<7' 5*0,"?-,!5' OŁ?5* 6,* #?557"@'Ł?8*'
)69+' ' $ ' %' @* ,'B +2C , , 2 Z
67' #!"?Ł§ !" "?-67" #?557"7@' "?C7@8' G !" P7' *77 #' -!'
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$ 4' &7?F. &%(=&, ('?D%* %' -'
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)'$ ' ' * %'4 ' ?5*P7,-§ JF-' #?Ł,<k/ #?5'
7",-' ?5@' #7,O7' $ L ' ? ' F* !X' ' =X ' 7"57' !'
#?"87 -!' J7' #?57"@?5@ 7 #' J"!O*67"7' -!' J7
P!"*-' #?5"7@*F5@62"@7*-' -!' ,5@NHA"Z!5?JE7' $= L' : '
@ ,5',Ł' $L >' '4 &' ' $' ' 67'
#7",<?5*?"7 J7--7"# ?557"7@'-6?5'!-67"§,5' ?*' ?*' -678'
"7U7"75<7 ,5-7EE7<-' #!"7-6?5' P7?E-6 ?5@ ?*6,!51' MEA ' : '
4 ' 'F 66 ' ',M' + ' 7' P?*' P< bJ<**7@§
?5@# #?557"7@' O7 ?' C75-E7#?5' + ' ' ' ! ,$
%%%' '4 ' 67' #!*-'*P77-E8' #?557"7@' C75-E7#?5' ?Ł,U7
! . ' $'(7"!& ( )' , : '!" #Ł Y 9%". "!"#/‹ 8 (#?
#& +Ł ! '%(('!& ' N $' ('&' ' $* %0
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67' #!"?Ł§ !" "?-67" #?557"7@' "?C7@8' G !" P7' *77 #' -!'
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N $'(' , * &77"#/ I ' 6
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7",-' ?5@' #7,O7' $ L ' ? ' F* !X' ' =X ' 7"57' !'
#?"87 -!' J7' #?57"7@'Ł,O7?'C75-8ŁŁ #?5' $A '2 $ '
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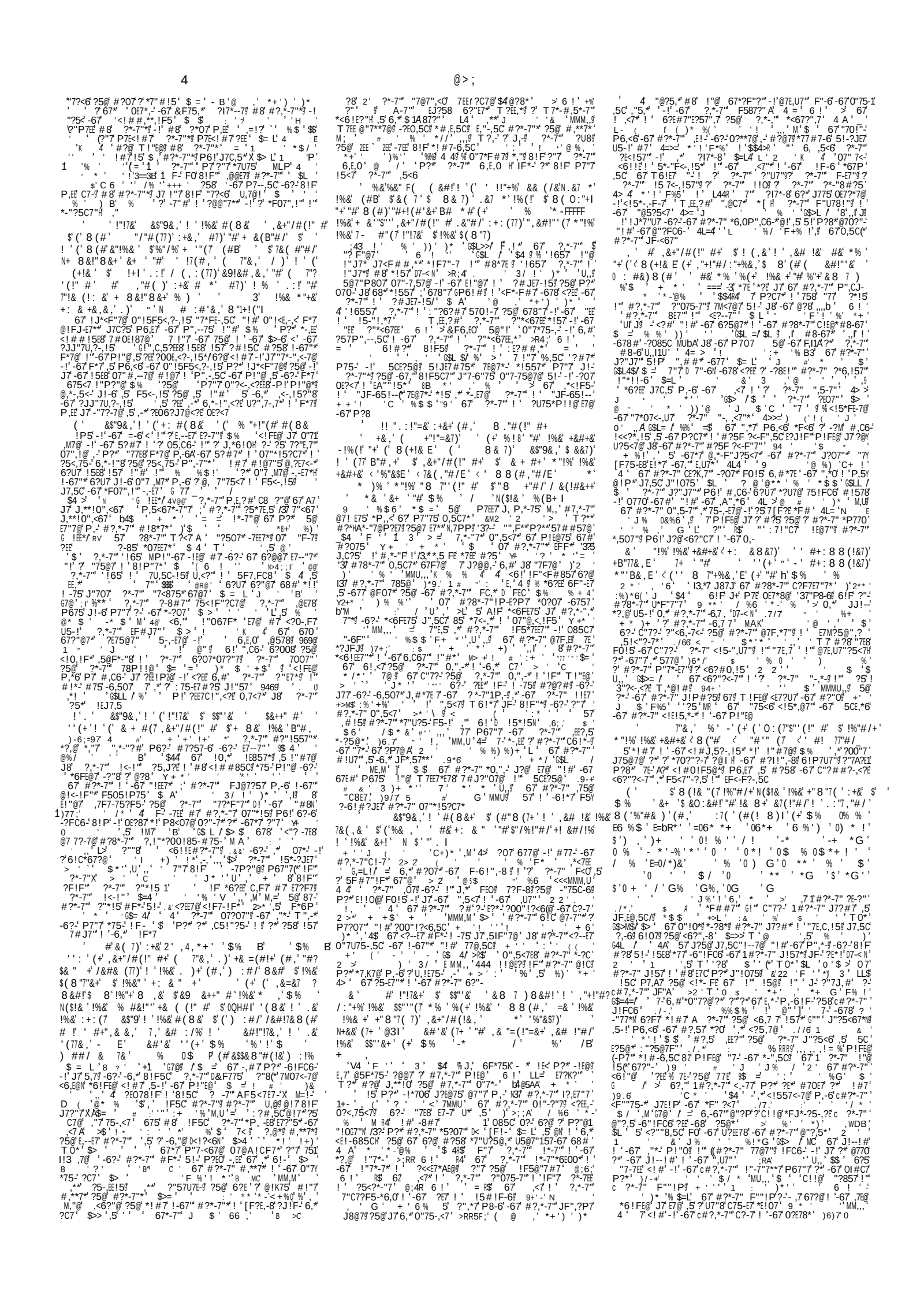

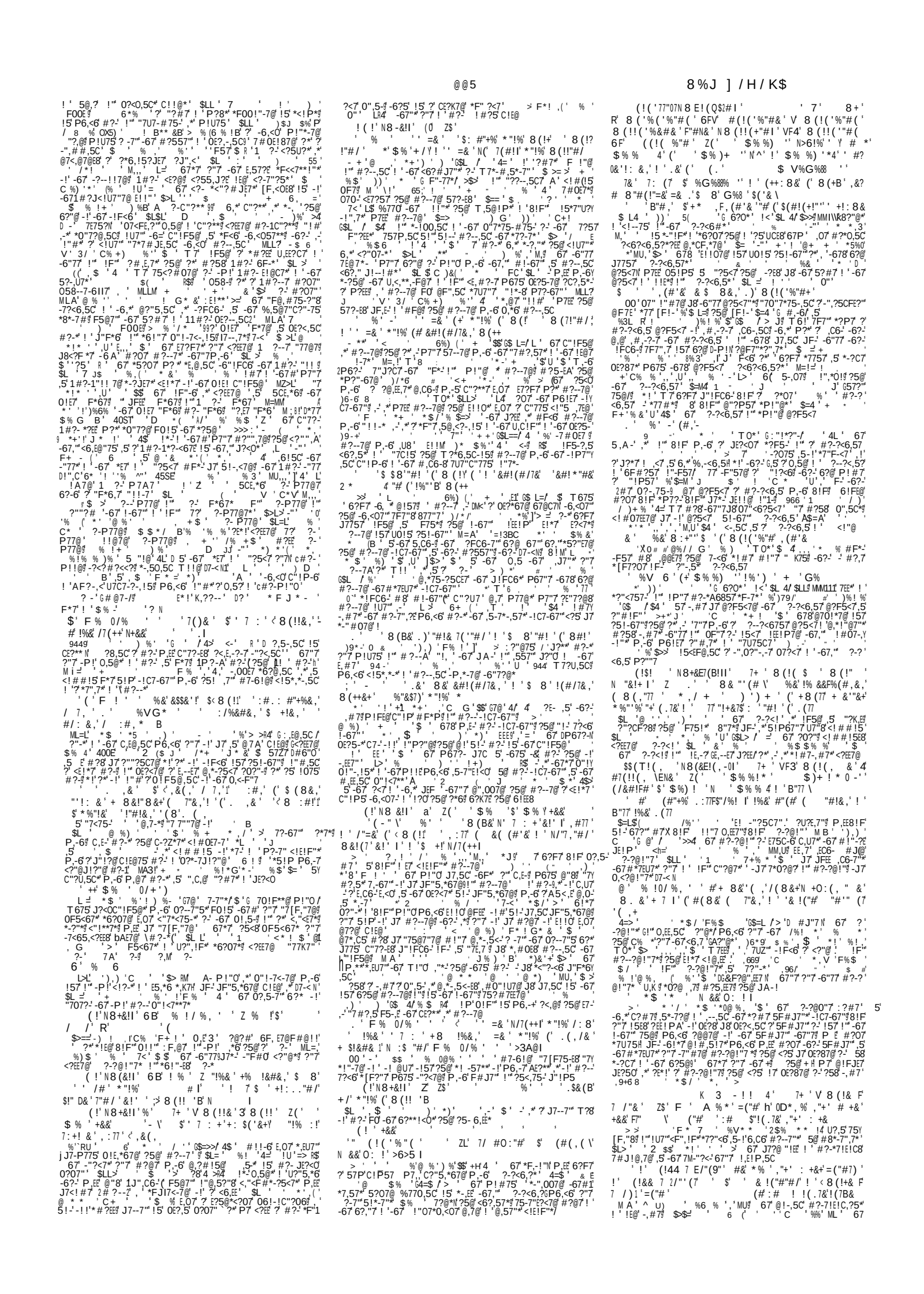

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%'L $ % '*-' G+-'^ ,5' P77-' ' ' 3 ';:5 < !*FF,'?E@!"#!55$!5@ J7!"5 "8 '#,5'I7#7<<?*?E?'D7-<N' " C)& ' * ' ' @5 P7I75'-F"-F"?5'A7#M<<?5' ! ' ,< % ' (N>3AA' '5;A' ,*#?7<<? #,5#!@!"')'$ ' F* /' ?--','@A' 7EE7 IX# !5@"?7@?5' #?",?5 0,57 C7#?7<<??5 -'!5 !557' $$ *) ,5' T" T ,EE<07" R5VH>@' * ' +'3',#?7<<?')'$$=' % *''F* /' ?--'''@;' '3?"?*!,!*706 ;'67 !5 75C 68* #?7<<675') 5 *' (' 43W V?O?",A7*# ?<<67 E8*?EA'X' ' 55*'C % 'e`R' "7 !PE7 ?--7 O,"O7 @F"7 <67* 6,"7 <",*-' -!' #7<67? 67',* F"7 *!FE7 *OF*7' $ 'O' ' '@' '=' <6 #?E7 #?* 6,* #?<6 (' #?# ?* 68# *7EF75? H!$ 3%'!' 45>' 6,E,0 ? P,-6'?' 7*-' 6C7' ?@ P7@ 6,#' ?5!A7"' P8 7 D E7M?5@?7"' *?8*-!'6,# N !P'D3!F #?* J7 *E,O7' ?' #?5C7"8 ;'#?<<6,* <6?5C,*' 5 A'5 ?' 'C %'G "J /*' F-!P6?-' #?O7-6 -6,*!" ?"8?5@ 67" #?-<67 6,EE,007X A$ = ' 5 = 'F*!,' ! 'N>R4A!'5>' F<67 [F?"'7EE7* ?*-67 F57 [F?E #?-<67*E?,7' !57 ,5' -67' *' $= $ 1 ' ') ' +' %' *' '4R5' 6,* 7"!,<?E" "!C75,7 ! '-67 !P?"@* ?5@ -67,"" ?-<67*' $= L' * %) ' ' 7"#' ,5 F5-,5C? P675' ?' T !E' @7*,"7* <!OFE?-,!5? 67',* *?,@'-!' C!' -!' 6,* #?-<6' !"-!'6,* #?-7
$' ' #&!+' &O:(7 "#' (/&' (#B ? +!(!" #' &!' 'E #&!+' $&77 * ' ' 8 (#" #' 6
>' + G' F* /' ?--' M,' $= A7E,< * <576-F # J?*#' O7< 075@7-!' 67'!"?M7#7<<F#'D FEC')*c 7+% 6+ =7P7J?' D7-<N' $ ' ' ' $ '@' '$4' <6 #!5'P,-6'6,* #?<6 #?@7 68#' ?-' 7*7' A$ '@ *$/'@% ' R' 76<67?@ '0/%)*$/% ' $ ' 4 ' ' G'@*,* ' !'C&' T O*' $ - -67''7' *6!F@7' 57,-67" ,7E!P*6-0' ! ' -67,"" #?-<67*9 5!" 7?"7 ! '?58*F<6 ?*?"7?-7" -67" P!"E@E8' <!#O-' ?<<! #0-7@ !" -678" J7--7"*9 ?58'-6,5C E7-' !"P,-6*-?5@-67#9 -!' D7-<N' 1 > = ' * ' * ' @ * ' G ?E " / $= ?"" 8 -68 #?-<6' $ ' 1 ' = ' '0"!F@7' @,*@?,5 FE-' #?557 -6?- -6!5O7-6' J8#*7E !F7" C!!@-!' 6?F7 ?' #?-<67 !" 7E!P7',5' -6,* E, 7' $ >$ % '@* $ ' -* $' MMU,,' =L 7' 6?,"" 7M?#OE7 E7"57 7MO7",75<7 57 !"757 #?<67 !" #?,J-7"-!'?@#U--
' !'(E #' #&#!'(#!(/ #"+!' "=(7' 6
)'$ '%+!' *,'C& 4 =' <67 #?5 ",@7* U5-!' 6,* #?<<67' $ ' *G %'!' ' L' 67"7 7* 5!' #?<67 F53-!' #77 5@ -6?-' #7 E8O7* -,E7' $ $ ') $ (' \ '
U,,' 4> 57 U-6,'" #?<67 -!' 68 #' P?* *!<6-' ?5@ *07" -' $ 4 ' @ ' * ' 'MM,U ' =4 F7"8 #?5 P,-6 6,* #?-<67' $ =' ' * ' %+ + ' F %! % * ')* $ ' -!' *7--7 #?-<67* ! ' *P!!"@7 OE?87"* -!C7-67"@)'$ > ' % ' ' C) ' ,@ !F" #?<67* # !5*-"!F* -!' J76!FE@7 ?5@ FEE ! ' #,C6-' $! # ' c' ' ' U' F' $' ?-<6' -!' #?-<6' $ 6?F7 75<!F5-"7@ 6,#
' ' & + #' N ' '(+" #(77)' (' #: 8 .& ' $' & + #+' (' !%"#/!' !%(!" "+ (.7& ! ' ' #!&#, ' ' 8 &!&' *"!%' (# !%& ' (+' (# &O:(7' #' % (+&+' *'- ' ! ' $ ' * ' (' $ %) ' 2 *' B / * ' *' -B' %' $ %) '-* ' 7+ ' * ' %' '%' $ %) '-* ' (.7& ! ' =& ' 8 &' ,&$&(!' $' (&7)' $' ! * ' & + #+' *' 6 '- '%) ! ' .&' &O:(7 "# * &++ 9 ' ' LL' ,5 ' %' %' > ' #!5C7* U*' D"<' -67 @7U,E*N *6?E-!' @"7<<67' !' E!5C7 6?*-!F J75 !F"7 #7<<67 ?8' ?5@' I7"7') ' %) '*-' -%$ ' L',5' ' @' G$L=4/ ' 07*<6*7P7 !5@ 6,5 #?<<67 ' ' '

8 (!'%F "$7& ' (' "$7& :+&,' "# $" "#/' ' 8 &!"!" #+'
8 (!'%2F "$7"#/' FG+$%& ' B' (' 8&!% ,' $' "$7"#/'
/ :#+! ' (, (!' !%& 8' $ ' 7 #/F (#/& +% !"#/' "#
F8 (!'%&+' 7+ #$ '4' (# ' 6 ' 6 B'
,L-?'A ?-<6' J!!0' !*77>%' $= '1 :** * $ %'4 '
T 6?-' !5*FE-?-,!5*¶ P6?-' # J?**,7*¶?5@?'P6!E7' !F5<7E'
!?"@! ' ?57* T",C6- ;'!"' 1 ?-<6 J"!O7"*¶ #F*-' C!'-' -'67
05,--,5C '?' ",5<7* !U7 %5!-' 1L>$; ' ' & '
+! ' ' B'% ' $ ' * 'M- ' ?*7 J?EE 6?@ 6?"@E8
J775 ,5-"!@F<7D@ P675' <7"-?,5' 75-6F*,?*-,<' *-F@75-*' <!5Y
<7,U7@ -67',@7?'! '(' \1# ?-<6' C?#7(P,-6' T ,EE,?#*' !EE7C7'
MLLL'@%", $'F ' 4 'F!E8' R4' <6?#0,!5'<67**' 0E?87"' P,EE
! -75'E!*7,?' #?-<6' C?#7 -!'?' ?"' ,5 7",!"' !00!575-' $=>
*' " ?' 'G,=M>/> 67*5,-' "87"*' !FC6-'-!"',@7J8'
-67'1#?-<6 6!"*7*?EE-67'@ A'E!5C' MLA' ' ' +$'4L!'F57'
L4LR4' 67"7' ?"7' !F"' !" ,U7' 8!F5C' 07!0E7¶ ?5@' -P!' !E@
P,@!P7"*@!' -67' #?-<6 #?0,5C?5@-67'1#?-<6#?"'',5C' +> M
& '-"'F %)%'(')&'4 7'@7#?5@7@?'6?5@*!#7
T, 7¶P6,<6'-678*!E@6,#'?-'-67 ",<7'! ?5' <6,5C 67?@¶?5@@
-67'1 ?-<6 #!5C7"?**F"7@'6,#¶-6?-'07-<N' + >@% ' %
F' 4' FC' R4' 67"7 6?* J775'?'7U,U?E ! *!#7 ! -67' !E@'
*0!"-,5C'C?#J,-*P6,<6'6?@' !"E!5C' ?EE75,5-!'@,* ?U!F"' !"
e#?-<6'0E?8' $L ' C% ,(' % ' <-'4> !$' 67'<6?#0,!5Y
6,0 ?"7'0E?87@'!5' @, 7"75-' 0",5<,0E7*9' -67' ?#-?F"* J7,5C'
J8' 6!E7* !"' A#?-<6'ÅŒ; A'?5<' -67' !075' J8' *-"!O7*' $L '
' F%5' ' 0"'4R$' -7,5,-K',*' -67' ,"*-!15,?-<6 0E?87"
E,U,5C' + *! < F+'!" 67' "7<!,E' P,-6' ' 'EJ'
e#?-<6', E7,*,5<!5*,@7"?JE7' 6 !'$ ¤ 67' 7- !"@e#?-<6'
", E,5C',*'U7"8'7MO75*,U7'-!'0"!@F<7
(!'%' N8&&!HI' 6B' 7+ ' ,' 8+' '%& ' ;F6'
8 (!'%&' ' 8 & N'I7" ' 6FV' 8 (%& ' V 8 &!'%'6F'
8 (!'%' Z(' $) ' $) ' N8 , ') 4'
[+ ' $))%B' $) %,' (!(7' $ 3%B' ' /' $) %B'
!' $)) %' W=:7/(' ' !) &+' >$))%@>$)) %
67'FE-7',!"7-8 ! E!!C8',*!J*<F"7' ! #'7 6?U7?--7#0-7@
-!' <!557<-' -67'P!"@P,-6' "' $,3%'5,F<F*!'-67
5!*7¶5!*-"!@F¤5!KKE7' !'?' E?#0¤,5' #7@ 'E?#0 P-",<' ?5@'
P,-6' '$+))+' #F<F*!'-67'5!*7¶P675<7' -'$*))*'*'G
>$+))+' 4'*5F '0 '?'<?5@E7 d
> $' %&' *"'B' $'(' (#,7&' '7(8 '
4FEE' $'4 ' ;%' 'MU5'4$' *'-6!P'*77*-!*!#7-8"57'
?'-!"<67' 67'JE?*7'-67"7 ! '8JE!P7'!F-!X7-!J"7557-6'-67'
P7807¶ T,-6 !F-7'E787'!"' - -7-6?-!-67'#?<<67'J"7557-6'
$ A'D 6 ('C% ' @' ' ,,' <EM'G$ / > L' ?-<67*'
!"<?5@7EE7*' $ 44 -"') %') B'@ '@ '4 >'
-67' #7<<67'J7'!F7"@707'8 *7--7',5'-67' !8E7§6,-'*6?EE?5!157
J7 8 [F785-7' $ '*+ %! ,'$$' 67 ?-57Z*7
! '!8E7' #?8'5!-' JF"57'-8F ?'P7807 !"' #?-<67' J7'OF-!-67"-!'
bc$ > ' M ' *) %, 3' T,;E<O7"' + B$!
)769'O# ' *!*' ' #! ' -6'-67'P6,<67' *7"F7-6' !"'
?-<67*-!' JF#7,5' E?#07*' $= $' '@ ' ' 'M=M
'-67' C"?07*' P,-6' -6,*' ?E#? 6",*-,!" ,<,5F*' @!-6'
<?",7¶-67"7' J7' #?@7 7M<7EE75-' P7,0*' !"' #?-<67*' !"' E?#0*
?5@<?5@E7*' $= ' +!' / 'M,,' '
!"' P,EE,-' D-67' *#!07' ! '*FE06F"N ??*,E8' E,C6-' ?' <?5@E7¶
F5-,EE' -67' E?#7 ?00"!?<J7-6'-67' #?-<6
4 ' #"#+! : 8&#!' ' #+"+!"#/' $ (' *"'B' ' , '
&' $'%&8 ' ! * ' ' !! #'&!' '+' & (&,' !%(!'
*%&#7"/%!&,' (!'!%&'&#,'"!"+'# !'&(+")'&9!"#/ :"+%&,'
(#,' ' #!"#:&# ' : 8' (!' (' :*'&,'$ '
($" "#/' (## #' !%& ' $' &F(8+' (#,'$ '"/#"!"#/' ('
! ("# $ /:# *,& ' 7+ "# ' ' 'N+&& O: !'
>4R>!' $' *')&'%' $%) '>+&& ' #@-@"
67 *G0$%) '5!P'<!5*.*!'E!!*7E8 -P.*-7@ 67#075'
<!'@*-7707@,5'?*!E-,!5'! '*?E-07-"7 ?5@E,#7 P?-7"¶?5@'
JF"5*?-7<7'?'!57?8?"@',5'-6"77 6!F"*' 67'G #'
<!?-7@ @, '*?',) '@$L / 'L' ?-<67*¶UIK P7,C6-'
$ > ' 5,5' T F"57") ') ' 3B !' GMLL!/ -7#¶ !" ?' #?<67'=!' $= ' ' % @%)&' ?-<'
: 5@-67"7? -7"*?7"<6,5C-67 7EE!P'D ;F,@!' ?PO7*%9'@
!F5@-6"77 #?-<67*' "7?@@ UO!5 6,#' $= ¶ -¶
@ '*(' %'MM,,' L-' ,7@' !F"?5@' !F"¶?5@' ,U7'?5@' ,U7'
-!C7-67"' P,-6' -67' #?-<67*!' -67,"' #F*O7-*!' $= >' * (
@ + %) ' !!' '>4 -'P?*?' !",?5*E?U7-6?-*-"?5CE7@
6,#'D -?J?E.0?"' P,-6'?' #?-<6' $A>') ,) 'C 'G7?E' /
4 *' ' #F*O7-¶ !" #F*[F7-¶,*'?' "7 ?"# ' !"#7"E8
,"7@J8'-67'?00E,<?-,!5 ! ?'E,C6-7@#?-<6' U = # '
)*'G$L= /' '4 >' 678 ¶?@?"-"?,5¶P6,<6'P?*<!5Y
57<-7@ P,-6'?' ÆF5-' !"*E!P' #?-<6' +*< $ '
*%0 %!' $' * +$6' + ' =' %) !?*#?EE
0,7<7 ! '<?5@E7 75@¶ !" C"?7*7@ -P,5T !" -?07 'F*7@ -!'
C5,-7 -67'CF50!P@"',5 J E?*-,5C' E9/*5 ' $ %'
G$L>=/ ' 4 ' 67'!-67"' P?*-67 #?5*-?5@,5C' J8'P,-6'
?'E,C6-7@ #?-<6'?5@@7-7",57@ -!'-!FC6-67'F*7
+> ' 4 '*E,' TO*'$L =' $' 67'
#?-<6'!' F",7,*E,C6-7@¶ O*-57@-!'-67' ,*-!<O'!'"?C7
. ' %& 8 (!& "(7 $'*%"'% 8 (!'%&+' ' #+"+!' ' ,
&!' ' & (&,'$ '"/#"!" #
$ >? * ' %$')' '$ ' :F570 P@7"* ?5@ #?-<67
-6?-' P?*7 6?@ ?-' -67 T?-<6 !5' 8@*!#7"' U85' 4 L'
* ' J % ' -F¶,¶ 6"77 !" !F"7 8?"@*!'
#?-<6¶,5' *7F7"?E 077<7*# 6?5C,5C ?-' 6,*C,"@E7' $= '
%% '@%)' 6' ,'U,,'G$L4$¶ > ,57'E7?*-*' #!"7 ! '
0!P@7"¶ P,-6' ?-<6' ?5@# 7?@' $> ,' ,' ,' ,' ,&(,'
* ' ' !' >' 67'!F-P?"@' !?-!'-67' F--' *'C!!@'-!'
#?O7' ,?-<6' $> >'),) 'C 'G7@' / EEE'$ R4' T675'
-67"7',*' ?58' ?00"7675*,!5' !'@?5C7"¶6,*' D,7'?' CF557"@"N'
,7E@ *-?' '*?"#?@P,-6'#?-<6' ML=! %' .' !M' !'
) ' 'U¶ 7 !"7' -67',5U75-,!5 ! 'E!<O*¶*#?EE
?"#*' P7"7' ,"7@J8'#?5*! '#?-<6
A ' #' !"'7&' $' , 8&+!"' :+&' ' #+"+!"#/' $' '
"&'&' $' , ' ,!%' (& ' * ' &!' ' ," &,' "#
8&?!&,' +:7 %: ' + ' (+' ! ' .&' &(,"7)' "/#"!&,' .)'!%&'
:+&' $'(' !"#,&F. 9' (#,' +& =*#/' ! ' 7"/%!' (' ' (#,7&
'7(8 ' ' ! ' +&!' $" &' ! '$':&7' 6 ' &9'F H ! H
$ ' ' '4 R4' ?-<67-!' E8C6-7 ' <?5@7EE¶ %' $
'2 6 '@ '@)'G$ /4' T675-67'*-77E7'?5@-67'
E,5-' J7'05!<0@7'-!C,-67"¶?' #?5 #?8'E,C6-'6,*#?-<6' J8'-67'
*0?"OE7' $= L'!3 %%$ ' %' ' * 'U',' > !' E,C6-'-67,"'
#?-<67*?-' #'8' -,5@7"' $= ' ' 6 * 'B*' '$$$$
T6?-'?'P!"E@' ! ' ,"7?5@'<?5@E7¶ #?-<67*?5@' -,5@7" J!M7*
@,@'8!F'0F"<6?*7) $>$' *' !'F*%' !)' =>>R' 67"7¶P<"7
0 H' 0,

!F5@'?J!F-'-67# '*7U7"?E ," ?-<67*@,0Z@',5 ",#*-!57'
%'4EEO' ' , * (' ' G$>>U' L' 67"7 ?"7 #?5@
P?8*!'E,C6-,5C'?'<?5@E7¶J8'?' 0,7<7 !'0?07"¶J8'<6?"<!?@
J8'0,-<!?E!"J8'?J",#*-!57 #?-<6¶ %'\55'! ' ,$''
) 3 + ' 7"<F"8',"*! !F5@' !F-! !"6F#?5'P7?E ,5@7"'
J!M¶ #?-<67*¶ ,"7,"!5*¶ E,5-?5@*-77E! $LL''1¶
* &' /) ' ' * & 'L' 67 0"7*75-0?"?#5' #?-<6 6?*
[F,-7'*F07"*7@7@-67'!@'J",#*-!57 #?-<6¶ #?@7 ! '?'*0E,5-7"
! 'P!!@'?J!F-'*,M',5<67*E!5C¶?5@@,007@'?-' J!-6'75@*
. ' '+"8"7('(!"'7&' :+&,' $ '$: 8"/(!" #
B' ' ' ' ' '2' "75<6'?5@ 675,*6' T,57*
?"7 '<!##!5E8 0"7*7"U7@' J8'-67' ?-<6' $>' ' ("
B' +//(0' %)' ' 7E-' J",#*-!57 ¶@,0' ,5-!' ,'
E,0!'<!?"*7 E,5575<E!-6 ?07'!57'!'-67*7 #?-<67*¶*7-
!57 75@!' ' -' !5' ,"7¶?5@' OF-',-' 5-!'-67'JF5C'6!E7'!'?"<?*0'
$L 'H ' ' ' ' ' ' ' ,' *F*7 E¶ -!'<!F5-7"?<-' -67 ¶
-75@75<6¶ -!' ?<,@,-8¶ J8' JF"5,5C'?' *FE06F"# ?-<6',5' -67
<?*0*' $L ' 6 !' ' 2 ' !" #?07 P"-,5C 0?07"# ?-<67*¶
P6,<6' JF"5' P,-6'?' J",C6-' E?#7 ?5@ @, EF*7 ?5 ?C"77?JE7
!@!F"¶ # !,*-75'7?<6*,@7' ! '-67'0?07"P,-6' -,5<-F"7 ! 'J75Y
K!,5'D7-<N' $L>4 ' + ' F 'G**!' -U' ,¶ F",!F*
!'J17<-*?ƩM3F-?'!!-!E!5C¶,5'-67' !"#'! ?-,5'<"!**7*G#?@7
!'E?-6'?5@J"!P5'0?07"@,007@,5'J",#*-!57^<?EE7@'#?-<67*
J8'J77 ?5<,7"*/
!'' ' '+8(77'! '%' :+&,'$ ' /"="#/'7"/%!' 6
' " ' 1 # ' ' +! ,(' *,' J ' ! ' G ?OE'
!<'4 ' 67'P6,<6'-678*!E@6,#'?'-67 ",<7'! ?5' <6,5C 67?@¶?5@@
-67'1 ?-<6 #!5C7"?**F"7@'6,#¶-6?-'07-<N' + >@% ' %
F' 4' FC' R4' 67"7 6?* J775'?'7U,U?E ! *!#7 ! -67' !E@'
*0!"-,5C'C?#J,-*P6,<6'6?@' !"E!5C' ?EE75,5-!'@,* ?U!F"' !"
e#?-<6'0E?8' $L ' C% ,(' % ' <-'4> !$' 67'<6?#0,!5Y
6,0 ?"7'0E?87@'!5' @, 7"75-' 0",5<,0E7*9' -67' ?#-?F"* J7,5C'
J8' 6!E7* !"' A#?-<6'ÅŒ; A'?5<' -67' !075' J8' *-"!O7*' $L '
' F%5' ' 0"'4R$' -7,5,-K',*' -67' ,"*-!15,?-<6 0E?87"
E,U,5C' + *! < F+'!" 67' "7<!,E' P,-6' ' 'EJ'
e#?-<6', E7,*,5<!5*,@7"?JE7' 6 !'$ ¤ 67' 7- !"@e#?-<6'
", E,5C',*'U7"8'7MO75*,U7'-!'0"!@F<7
(!'%' N8&&!HI' 6B' 7+ ' ,' 8+' '%& ' ;F6'
8 (!'%&' ' 8 & N'I7" ' 6FV' 8 (%& ' V 8 &!'%'6F'
8 (!'%' Z(' $) ' $) ' N8 , ') 4'
[+ ' $))%B' $) %,' (!(7' $ 3%B' ' /' $) %B'
!' $)) %' W=:7/(' ' !) &+' >$))%@>$)) %
67'FE-7',!"7-8 ! E!!C8',*!J*<F"7' ! #'7 6?U7?--7#0-7@
-!' <!557<-' -67'P!"@P,-6' "' $,3%'5,F<F*!'-67
5!*7¶5!*-"!@F¤5!KKE7' !'?' E?#0¤,5' #7@ 'E?#0 P-",<' ?5@'
P,-6' '$+))+' #F<F*!'-67'5!*7¶P675<7' -'$*))*'*'G
>$+))+' 4'*5F '0 '?'<?5@E7 d
> $' %&' *"'B' $'(' (#,7&' '7(8 '
4FEE' $'4 ' ;%' 'MU5'4$' *'-6!P'*77*-!*!#7-8"57'
?'-!"<67' 67'JE?*7'-67"7 ! '8JE!P7'!F-!X7-!J"7557-6'-67'
P7807¶ T,-6 !F-7'E787'!"' - -7-6?-!-67'#?<<67'J"7557-6'
$ A'D 6 ('C% ' @' ' ,,' <EM'G$ / > L' ?-<67*'
!"<?5@7EE7*' $ 44 -"') %') B'@ '@ '4 >'
-67' #7<<67'J7'!F7"@707'8 *7--7',5'-67' !8E7§6,-'*6?EE?5!157
J7 8 [F785-7' $ '*+ %! ,'$$' 67 ?-57Z*7
! '!8E7' #?8'5!-' JF"57'-8F ?'P7807 !"' #?-<67' J7'OF-!-67"-!'
bc$ > ' M ' *) %, 3' T,;E<O7"' + B$!
)769'O# ' *!*' ' #! ' -6'-67'P6,<67' *7"F7-6' !"'
?-<67*-!' JF#7,5' E?#07*' $= $' '@ ' ' 'M=M
'-67' C"?07*' P,-6' -6,*' ?E#? 6",*-,!" ,<,5F*' @!-6'
<?",7¶-67"7' J7' #?@7 7M<7EE75-' P7,0*' !"' #?-<67*' !"' E?#0*
?5@<?5@E7*' $= ' +!' / 'M,,' '
!"' P,EE,-' D-67' *#!07' ! '*FE06F"N ??*,E8' E,C6-' ?' <?5@E7¶
F5-,EE' -67' E?#7 ?00"!?<J7-6'-67' #?-<6
4 ' #"#+! : 8&#!' ' #+"+!"#/' $ (' *"'B' ' , '
&' $'%&8 ' ! * ' ' !! #'&!' '+' & (&,' !%(!'
*%&#7"/%!&,' (!'!%&'&#,'"!"+'# !'&(+")'&9!"#/ :"+%&,'
(#,' ' #!"#:&# ' : 8' (!' (' :*'&,'$ '
($" "#/' (## #' !%& ' $' &F(8+' (#,'$ '"/#"!"#/' ('
! ("# $ /:# *,& ' 7+ "# ' ' 'N+&& O: !'
>4R>!' $' *')&'%' $%) '>+&& ' #@-@"
67 *G0$%) '5!P'<!5*.*!'E!!*7E8 -P.*-7@ 67#075'
<!'@*-7707@,5'?*!E-,!5'! '*?E-07-"7 ?5@E,#7 P?-7"¶?5@'
JF"5*?-7<7'?'!57?8?"@',5'-6"77 6!F"*' 67'G #'
<!?-7@ @, '*?',) '@$L / 'L' ?-<67*¶UIK P7,C6-'
$ > ' 5,5' T F"57") ') ' 3B !' GMLL!/ -7#¶ !" ?' #?<67'=!' $= ' ' % @%)&' ?-<'
: 5@-67"7? -7"*?7"<6,5C-67 7EE!P'D ;F,@!' ?PO7*%9'@
!F5@-6"77 #?-<67*' "7?@@ UO!5 6,#' $= ¶ -¶
@ '*(' %'MM,,' L-' ,7@' !F"?5@' !F"¶?5@' ,U7'?5@' ,U7'
-!C7-67"' P,-6' -67' #?-<67*!' -67,"' #F*O7-*!' $= >' * (
@ + %) ' !!' '>4 -'P?*?' !",?5*E?U7-6?-*-"?5CE7@
6,#'D -?J?E.0?"' P,-6'?' #?-<6' $A>') ,) 'C 'G7?E' /
4 *' ' #F*O7-¶ !" #F*[F7-¶,*'?' "7 ?"# ' !"#7"E8
,"7@J8'-67'?00E,<?-,!5 ! ?'E,C6-7@#?-<6' U = # '
)*'G$L= /' '4 >' 678 ¶?@?"-"?,5¶P6,<6'P?*<!5Y
57<-7@ P,-6'?' ÆF5-' !"*E!P' #?-<6' +*< $ '
*%0 %!' $' * +$6' + ' =' %) !?*#?EE
0,7<7 ! '<?5@E7 75@¶ !" C"?7*7@ -P,5T !" -?07 'F*7@ -!'
C5,-7 -67'CF50!P@"',5 J E?*-,5C' E9/*5 ' $ %'
G$L>=/ ' 4 ' 67'!-67"' P?*-67 #?5*-?5@,5C' J8'P,-6'
?'E,C6-7@ #?-<6'?5@@7-7",57@ -!'-!FC6-67'F*7
+> ' 4 '*E,' TO*'$L =' $' 67'
#?-<6'!' F",7,*E,C6-7@¶ O*-57@-!'-67' ,*-!<O'!'"?C7
. ' %& 8 (!& "(7 $'*%"'% 8 (!'%&+' ' #+"+!' ' ,
&!' ' & (&,'$ '"/#"!" #
$ >? * ' %$')' '$ ' :F570 P@7"* ?5@ #?-<67
-6?-' P?*7 6?@ ?-' -67 T?-<6 !5' 8@*!#7"' U85' 4 L'
* ' J % ' -F¶,¶ 6"77 !" !F"7 8?"@*!'
#?-<6¶,5' *7F7"?E 077<7*# 6?5C,5C ?-' 6,*C,"@E7' $= '
%% ' @%)' 6' ,'U,,'G$L4$¶ > ,57'E7?*-*' #!"7 ! '
0!P@7"¶ P,-6' ?-<6' ?5@# 7?@' $> ,' ,' ,' ,' ,&(,'
* ' ' !' >' 67'!F-P?"@' !?-!'-67' F--' *'C!!@'-!'
#?O7' ,?-<6' $> >'),) 'C 'G7@' / EEE'$ R4' T675'
-67"7',*' ?58' ?00"7675*,!5' !'@?5C7"¶6,*' D,7'?' CF557"@"N'
,7E@ *-?' '*?"#?@P,-6'#?-<6' ML=! %' .' !M' !'
) ' 'U¶ 7 !"7' -67',5U75-,!5 ! 'E!<O*¶*#?EE
?"#*' P7"7' ,"7@J8'#?5*! '#?-<6
A ' #' !"'7&' $' , 8&+!"' :+&' ' #+"+!"#/' $' '
"&'&' $' , ' ,!%' (& ' * ' &!' ' ," &,' "#
8&?!&,' +:7 %: ' + ' (+' ! ' .&' &(,"7)' "/#"!&,' .)'!%&'
:+&' $'(' !"#,&F. 9' (#,' +& =*#/' ! ' 7"/%!' (' ' (#,7&
'7(8 ' ' ! ' +&!' $" &' ! '$':&7' 6 ' &9'F H ! H
$ ' ' '4 R4' ?-<67-!' E8C6-7 ' <?5@7EE¶ %' $
'2 6 '@ '@)'G$ /4' T675-67'*-77E7'?5@-67'
E,5-' J7'05!<0@7'-!C,-67"¶?' #?5 #?8'E,C6-'6,*#?-<6' J8'-67'
*0?"OE7' $= L'!3 %%$ ' %' ' * 'U',' > !' E,C6-'-67,"'
#?-<67*?-' #'8' -,5@7"' $= ' ' 6 * 'B*' '$$$$
T6?-'?'P!"E@' ! ' ,"7?5@'<?5@E7¶ #?-<67*?5@' -,5@7" J!M7*
@,@'8!F'0F"<6?*7) $>$' *' !'F*%' !)' =>>R' 67"7¶P<"7
0 H' 0,

!F5@'?J!F-'-67# '*7U7"?E ," ?-<67*@,0Z@',5 ",#*-!57'
%'4EEO' ' , * (' ' G$>>U' L' 67"7 ?"7 #?5@
P?8*!'E,C6-,5C'?'<?5@E7¶J8'?' 0,7<7 !'0?07"¶J8'<6?"<!?@
J8'0,-<!?E!"J8'?J",#*-!57 #?-<6¶ %'\55'! ' ,$''
) 3 + ' 7"<F"8',"*! !F5@' !F-! !"6F#?5'P7?E ,5@7"'
J!M¶ #?-<67*¶ ,"7,"!5*¶ E,5-?5@*-77E! $LL''1¶
* &' /) ' ' * & 'L' 67 0"7*75-0?"?#5' #?-<6 6?*
[F,-7'*F07"*7@7@-67'!@'J",#*-!57 #?-<6¶ #?@7 ! '?'*0E,5-7"
! 'P!!@'?J!F-'*,M',5<67*E!5C¶?5@@,007@'?-' J!-6'75@*
. ' '+"8"7('(!"'7&' :+&,'$ ' $: 8"/(!" #
B' ' ' ' ' '2' "75<6'?5@ 675,*6' T,57*
?"7 '<!##!5E8 0"7*7"U7@' J8'-67' ?-<6' $>' ' ("
B' +//(0' %)' ' 7E-' J",#*-!57 ¶@,0' ,5-!' ,'
E,0!'<!?"*7 E,5575<E!-6 ?07'!57'!'-67*7 #?-<67*¶*7-
!57 75@!' ' -' !5' ,"7¶?5@' OF-',-' 5-!'-67'JF5C'6!E7'!'?"<?*0'
$L 'H ' ' ' ' ' ' ' ,' *F*7 E¶ -!'<!F5-7"?<-' -67 ¶
-75@75<6¶ -!' ?<,@,-8¶ J8' JF"5,5C'?' *FE06F"# ?-<6',5' -67
<?*0*' $L ' 6 !' ' 2 ' !" #?07 P"-,5C 0?07"# ?-<67*¶
P6,<6' JF"5' P,-6'?' J",C6-' E?#7 ?5@ @, EF*7 ?5 ?C"77?JE7
!@!F"¶ # !,*-75'7?<6*,@7' ! '-67'0?07"P,-6' -,5<-F"7 ! 'J75Y
K!,5'D7-<N' $L>4 ' + ' F 'G**!' -U' ,¶ F",!F*
!'J17<-*?ƩM3F-?'!!-!E!5C¶,5'-67' !"#'! ?-,5'<"!**7*G#?@7
!'E?-6'?5@J"!P5'0?07"@,007@,5'J",#*-!57^<?EE7@'#?-<67*
J8'J77 ?5<,7"*/
!'' ' '+8(77'! '%' :+&,'$ ' /"="#/'7"/%!' 6
' " ' 1 # ' ' +! ,(' *,' J ' ! ' G ?OE'
!<'4 ' 67'P6,<6'-678*!E@6,#'?'-67 ",<7'! ?5' <6,5C 67?@¶?5@@
-67'1 ?-<6 #!5C7"?**F"7@'6,#¶-6?-'07-<N' + >@% ' %
F' 4' FC' R4' 67"7 6?* J775'?'7U,U?E ! *!#7 ! -67' !E@'
*0!"-,5C'C?#J,-*P6,<6'6?@' !"E!5C' ?EE75,5-!'@,* ?U!F"' !"
e#?-<6'0E?8' $L ' C% ,(' % ' <-'4> !$' 67'<6?#0,!5Y
6,0 ?"7'0E?87@'!5' @, 7"75-' 0",5<,0E7*9' -67' ?#-?F"* J7,5C'
J8' 6!E7* !"' A#?-<6'ÅŒ; A'?5<' -67' !075' J8' *-"!O7*' $L '
' F%5' ' 0"'4R$' -7,5,-K',*' -67' ,"*-!15,?-<6 0E?87"
E,U,5C' + *! < F+'!" 67' "7<!,E' P,-6' ' 'EJ'
e#?-<6', E7,*,5<!5*,@7"?JE7' 6 !'$ ¤ 67' 7- !"@e#?-<6'
", E,5C',*'U7"8'7MO75*,U7'-!'0"!@F<7
(!'%' N8&&!HI' 6B' 7+ ' ,' 8+' '%& ' ;F6'
8 (!'%&' ' 8 & N'I7" ' 6FV' 8 (%& ' V 8 &!'%'6F'
8 (!'%' Z(' $) ' $) ' N8 , ') 4'
[+ ' $))%B' $) %,' (!(7' $ 3%B' ' /' $) %B'
!' $)) %' W=:7/(' ' !) &+' >$))%@>$)) %
67'FE-7',!"7-8 ! E!!C8',*!J*<F"7' ! #'7 6?U7?--7#0-7@
-!' <!557<-' -67'P!"@P,-6' "' $,3%'5,F<F*!'-67
5!*7¶5!*-"!@F¤5!KKE7' !'?' E?#0¤,5' #7@ 'E?#0 P-",<' ?5@'
P,-6' '$+))+' #F<F*!'-67'5!*7¶P675<7' -'$*))*'*'G
>$+))+' 4'*5F '0 '?'<?5@E7 d
> $' %&' *"'B' $'(' (#,7&' '7(8 '
4FEE' $'4 ' ;%' 'MU5'4$' *'-6!P'*77*-!*!#7-8"57'
?'-!"<67' 67'JE?*7'-67"7 ! '8JE!P7'!F-!X7-!J"7557-6'-67'
P7807¶ T,-6 !F-7'E787'!"' - -7-6?-!-67'#?<<67'J"7557-6'
$ A'D 6 ('C% ' @' ' ,,' <EM'G$ / > L' ?-<67*'
!"<?5@7EE7*' $ 44 -"') %') B'@ '@ '4 >'
-67' #7<<67'J7'!F7"@707'8 *7--7',5'-67' !8E7§6,-'*6?EE?5!157
J7 8 [F785-7' $ '*+ %! ,'$$' 67 ?-57Z*7
! '!8E7' #?8'5!-' JF"57'-8F ?'P7807 !"' #?-<67' J7'OF-!-67"-!'
bc$ > ' M ' *) %, 3' T,;E<O7"' + B$!
)769'O# ' *!*' ' #! ' -6'-67'P6,<67' *7"F7-6' !"'
?-<67*-!' JF#7,5' E?#07*' $= $' '@ ' ' 'M=M
'-67' C"?07*' P,-6' -6,*' ?E#? 6",*-,!" ,<,5F*' @!-6'
<?",7¶-67"7' J7' #?@7 7M<7EE75-' P7,0*' !"' #?-<67*' !"' E?#0*
?5@<?5@E7*' $= ' +!' / 'M,,' '
!"' P,EE,-' D-67' *#!07' ! '*FE06F"N ??*,E8' E,C6-' ?' <?5@E7¶
F5-,EE' -67' E?#7 ?00"!?<J7-6'-67' #?-<6
4 ' #"#+! : 8&#!' ' #+"+!"#/' $ (' *"'B' ' , '
&' $'%&8 ' ! * ' ' !! #'&!' '+' & (&,' !%(!'
*%&#7"/%!&,' (!'!%&'&#,'"!"+'# !'&(+")'&9!"#/ :"+%&,'
(#,' ' #!"#:&# ' : 8' (!' (' :*'&,'$ '
($" "#/' (## #' !%& ' $' &F(8+' (#,'$ '"/#"!"#/' ('
! ("# $ /:# *,& ' 7+ "# ' ' 'N+&& O: !'
>4R>!' $' *')&'%' $%) '>+&& ' #@-@"
67 *G0$%) '5!P'<!5*.*!'E!!*7E8 -P.*-7@ 67#075'
<!'@*-7707@,5'?*!E-,!5'! '*?E-07-"7 ?5@E,#7 P?-7"¶?5@'
JF"5*?-7<7'?'!57?8?"@',5'-6"77 6!F"*' 67'G #'
<!?-7@ @, '*?',) '@$L / 'L' ?-<67*¶UIK P7,C6-'
$ > ' 5,5' T F"57") ') ' 3B !' GMLL!/ -7#¶ !" ?' #?<67'=!' $= ' ' % @%)&' ?-<'
: 5@-67"7? -7"*?7"<6,5C-67 7EE!P'D ;F,@!' ?PO7*%9'@
!F5@-6"77 #?-<67*' "7?@@ UO!5 6,#' $= ¶ -¶
@ '*(' %'MM,,' L-' ,7@' !F"?5@' !F"¶?5@' ,U7'?5@' ,U7'
-!C7-67"' P,-6' -67' #?-<67*!' -67,"' #F*O7-*!' $= >' * (
@ + %) ' !!' '>4 -'P?*?' !",?5*E?U7-6?-*-"?5CE7@
6,#'D -?J?E.0?"' P,-6'?' #?-<6' $A>') ,) 'C 'G7?E' /
4 *' ' #F*O7-¶ !" #F*[F7-¶,*'?' "7 ?"# ' !"#7"E8
,"7@J8'-67'?00E,<?-,!5 ! ?'E,C6-7@#?-<6' U = # '
)*'G$L= /' '4 >' 678 ¶?@?"-"?,5¶P6,<6'P?*<!5Y
57<-7@ P,-6'?' ÆF5-' !"*E!P' #?-<6' +*< $ '
*%0 %!' $' * +$6' + ' =' %) !?*#?EE
0,7<7 ! '<?5@E7 75@¶ !" C"?7*7@ -P,5T !" -?07 'F*7@ -!'
C5,-7 -67'CF50!P@"',5 J E?*-,5C' E9/*5 ' $ %'
G$L>=/ ' 4 ' 67'!-67"' P?*-67 #?5*-?5@,5C' J8'P,-6'
?'E,C6-7@ #?-<6'?5@@7-7",57@ -!'-!FC6-67'F*7
+> ' 4 '*E,' TO*'$L =' $' 67'
#?-<6'!' F",7,*E,C6-7@¶ O*-57@-!'-67' ,*-!<O'!'"?C7
. ' %& 8 (!& "(7 $'*%"'% 8 (!'%&+' ' #+"+!' ' ,
&!' ' & (&,'$ '"/#"!" #
$ >? * ' %$')' '$ ' :F570 P@7"* ?5@ #?-<67
-6?-' P?*7 6?@ ?-' -67 T?-<6 !5' 8@*!#7"' U85' 4 L'
* ' J % ' -F¶,¶ 6"77 !" !F"7 8?"@*!'
#?-<6¶,5' *7F7"?E 077<7*# 6?5C,5C ?-' 6,*C,"@E7' $= '
%% ' @%)' 6' ,'U,,'G$L4$¶ > ,57'E7?*-*' #!"7 ! '
0!P@7"¶ P,-6' ?-<6' ?5@# 7?@' $> ,' ,' ,' ,' ,&(,'
* ' ' !' >' 67'!F-P?"@' !?-!'-67' F--' *'C!!@'-!'
#?O7' ,?-<6' $> >'),) 'C 'G7@' / EEE'$ R4' T675'
-67"7',*' ?58' ?00"7675*,!5' !'@?5C7"¶6,*' D,7'?' CF557"@"N'
,7E@ *-?' '*?"#?@P,-6'#?-<6' ML=! %' .' !M' !'
) ' 'U¶ 7 !"7' -67',5U75-,!5 ! 'E!<O*¶*#?EE
?"#*' P7"7' ,"7@J8'#?5*! '#?-<6
A ' #' !"'7&' $' , 8&+!"' :+&' ' #+"+!"#/' $' '
"&'&' $' , ' ,!%' (& ' * ' &!' ' ," &,' "#
8&?!&,' +:7 %: ' + ' (+' ! ' .&' &(,"7)' "/#"!&,' .)'!%&'
:+&' $'(' !"#,&F. 9' (#,' +& =*#/' ! ' 7"/%!' (' ' (#,7&
'7(8 ' ' ! ' +&!' $" &' ! '$':&7' 6 ' &9'F H ! H
$ ' ' '4 R4' ?-<67-!' E8C6-7 ' <?5@7EE¶ %' $
'2 6 '@ '@)'G$ /4' T675-67'*-77E7'?5@-67'
E,5-' J7'05!<0@7'-!C,-67"¶?' #?5 #?8'E,C6-'6,*#?-<6' J8'-67'
*0?"OE7' $= L'!3 %%$ ' %' ' * 'U',' > !' E,C6-'-67,"'
#?-<67*?-' #'8' -,5@7"' $= ' ' 6 * 'B*' '$$$$
T6?-'?'P!"E@' ! ' ,"7?5@'<?5@E7¶ #?-<67*?5@' -,5@7" J!M7*
@,@'8!F'0F"<6?*7) $>$' *' !'F*%' !)' =>>R' 67"7¶P<"7
0 H' 0,

O7E-¶7,-67"*,"7E!<O !-'1#?-<6<!<O'

6!F*7*' A-/ ('' 'F ' ' ,,,' '=4 %6?F7*!FC6-' !' #?-<6'#8'",75@ ,'" 6F",!9-!'#8@?FC6-7"' $=$?
J ,' %'!B7-<'B * C2 ' T6!*7*!E7@?FC6-7'"-675'P?*' #?-<6-'!T.E£,?#'@7 ?£75<,?' $===>4 '@' '
> ' 6!*7',£6#?-7@ ?"",?C7*'T67"7C!!@P,-6'J?@P7"7
#?-<6-'M=L!'! #' % ,'> 70-9 7'#?-<6@6,*7£@7*-'
!5'-!' "' '!£E!0' $> 'C' "' ',5'
G ?#@75/ 9 % ?#' 67?"-,£8'C£?@'8!F"'@7?"' ,*-7"',*'*!'
6?00,£8'#?"<6@'-!' "' -7U75*' $>$8 F +6' ,
/' , !P' '"758'!5'8!F'-!'#?-<6'-67#'F0'-!'!57
?5!-67"!' $>' 8' ' '$' T0*' 8' ' ,'#'6?*
?£E75',5£!U7'P,-6'?'8!F5C'P!#?5 ?5@'2-,*'0?"-£8-!'0'71
U75-'J?@'<!5*7[F75<7*9-6?-!'?#'*!'6?*-8-!'#?-<6'6,#'
$L 4 # 'V, B 5,£67'0,5C ?-<62@'P,-6'?5'
?C7@'P,7'$L'4 #'% 'M,' $' "8',8!F'
<?5'#?-<6'67"'P,-6'? F07' *AL' " ' %&*%'
4'75"8' '0"!0!*7@-!'#?-<6'6,#'P,-6*!#7'C"7?-!67,"7**'
h'.' -' 6
>7@ '4';%' ' $' !-7'#?8@75*'?5@'#?8@75*'
#?<<67-6'!F'8*?#'7Z>5W ,M'$>'#?<<67' T'-!C,@7"7*N'
L F'%55*(' *' ' G$ L=/ L' !U7"-,7
J",5C7-6 9-6?-!67',*'*!#7-,#7@",U75-!'#?-<6'5,#*7£7,5
#?"",?C7'P,-6'*!#7'P!#?5!'J?*7'0?"75-?C7
' ' ' $' 8' (77)' #&+&!$'"#' 8("(/&'C"7?-!?5-?C!5,*-* P7"7#!"7?,"£8'#?-<67@'-6?5' 7<07-!
07"6?0*7M07<-7@-!' 5@-67#
#+!'G ' *' % &9'!%' $'*' $%)'
'*'N('$(8"7))I'!'.&' 8&' ##&'!&,'.)'8("(/&'
*"!%' h' 7+' % ,' $'(#"8(7+' ' ("
$=L'< % ' *''%%>' !-!'J7U5P!"-68'-!'#?-<67'
,5'#?-",#!5,7@P,-6'-67'C"7?-7*-' ",5<7'!'-67'P!"£@7' $LZ
'P& 'F'%55*(' ' *' , 22>'J@ -'*'G*?,@'!"@
E!65/?C"7?-7'C",7?!'-67'#,5@7@?5@67?"-'J"7?O,5C@-!'
#?-<6'P,-6'?'!E*67'T!#?5' $' ' ' +)' ' !*'5'
,'=L' "FE8' 'J!£@',!?*!557-!'#?-<6',5'#8'0,5*7@' M=KH
&B /!% '-!'<!FOE7@!"#?-<6'H?*J,"@*@!7'
-67'0",5C@',=?!< ' % %'@% 'L' 678*6?£E
57F7'"6?F7'#8'JE7**,5C@',-678'#?-<6'P,-6!F-'#8'<!5*75-'
$=>' ' %'!' 'E,'L' 7'#?-<67@',5-!'?'#!*-'
5!JE7?5@#?"-,?£?#,£8'M=L!' # '/%' ' %$','>'
7-' 8C7"*'#?-<6'P,-6' ,5@*?5@'T!£*'P,-6' 6770' $>=
< ')'J' ,,@' '67'6?@J,"-6?5@'!"-F57-!'75-,-E7
6,#'-!'#?-<6',5-!'*F<6?'?#,£8?*'!F"*' $L4' N
) %$' ' *' ' 8!F5C'P!#?5 P6!'P!'F!6?-!'?*!
-6,5C@!'#?-<6,5C'P,-6'?'7£E!P'!'E!P'J,"-6' $L'4
/* G*$')' ' 6,*#?"@*"?-67"'-6?-!-67
0!-*P!!@*6?U7#?-<67@P,-6'-67'!"@!5*'
$ %' ' '(++'"(!&'0"#'"#' 8(#"#+%"'
''F &(!"#'N&+#+'!%"#/+!'!' :!'!/&!%&'
+'(+'!'$'8'('' +&!'G 'N(#!%&' &+#'
'!%"#/!'<6' N$'+&#+&'RI
$>'F*'B'F%G'1'&F675'-6?-'P?"'#?<6,-'?-'#7-7
-67'#?"7'?5@'-67'#85'$ ' ' *$'% ' *
TO*',4!!R,'T675'C!@6?-6'J8'*F<67<6?F5<7*75-'68#'-!'
#7!?5@-67"7!5<7#?-<67@#7'P,-6'6,#!$"7<075'#8'*7,
*F"758'<6?"C7@'P,-6'6,#!-8£D7-<\!'+()' "' #'
$',,,,' ' ' *'%'*?@"0'P,'#?-<62@P,-6'!!'JEF5-'
?'T,£E' ' +)' !'*,M',' !@'#?-<6'#7'P,-6'?
□!#7JF*,7-67#*7F7*,5 6F"<6b@,*<,0£,57!?5@?"7*£75@7'"
,C6-7@',5'-67,"0",F,7<!""F0-,!5'JF-'-'C!!@-'!#?-<6'
J!-6'-!C7-67"' M=!' !' %'!',,U,F']'=D@",?5N
62\U,5C'6,#G6"*-6"!#?<67@P,-6' ,5'<,?"'-6?-!
0!£!5,F*'&OT5^(5.'C*!,"' '(G$=>/' -'P?*#?-<67@
P,-6'#?58',5,"#,-,7*?5@0?**,!5*
!'.' -' 8(B&'(#(/&&8&#!'G '
Z' ' ' '@' ' ' ?<67#68#'P,-6'3'#?"857"7*
#*,07#67"'0?87!'!"-!'P7'68#',5-!'-?"<7
' ' &#' :#!&'(+'(#'(,=&+()' 7+'N#*'
(7*()+!'!'&#' :#!&'*"!%'&O:(7' *&' =&'(
8(!'%'$
' F%G'B'F'?' '4L4' 7"7',*5!'#!5'#7-!'#?<6'
)'*' *'>4' ?5£8'67'#?<<6,-'6!"5'P,-6'6,*
#?85'*-"!07*'@')''**'*&' 'MMM'$' F"7'#7857
P,-6'#8C6-' '#@&58C6-'68#'#?<67@')-6;=57'4 #
+',,==' 4=' 7?"7 5!-?JE7-!'#?-<67?C!!@0585C6-'
)796' ' %'!'',,,' 'G$L>>/,'>' 67'-!P57*#75'
!'J!-6'D M!"@?5@ ?#J",@C7N?"7'CE?@'P675'-678'#?8'
#?-<6'?5@?55!,7-67'*-F@75-*')7+;' ' !' ' ,5'
' ' !F'07"6?0*#?8'-6,507? 7<?F*7'*67',*'*!#7-6,5C'
,,' ' !F'07"6?0*#?8'-6,507? 7<?F*7'*67',*'*!#7-6,5C'
£!PI7"'-675'#8'*7£7? 6?-'%<?5'#?-<6'67"')-'
%%$%' ' 7£E'#?',':!@6?@5!-!#?-<67@'-677?P6!'
<!FE@X')/1' # $' 6?"0"7#7#J"?5<7
!5-67' 5C£,*6'0?"-' 5@*6?#7'!'J7,5C'#-6?@'J8*F<6?
!7 !F*7<!5*<,!F*U,"-F7'FO',5'7U7"8'67?"-')97/'8 &'
' ' $GL/' ' $>' !'05,C6-',5' 5C£?5@'<!FE@
#?-<6'6,#',5'-67'-!F"5?#75-'7M<70-!-67' FO7'!'F !£O'
E£.'' ' 8&&!"#' 8.(!'!$"/%!N[THH!' 6'
%'*)' 3%'!' !'#?<67P,-6'*,07'?'#F!-,*-F7'
!'#75',!'J7*-*')3-*' ' *,' =>L' 6F*#?<<6,-'
A!*7'#75'-,£E-67'#7"07'5,C6-' .-6;' #'J%%)'#'
4'&F675'M£'#?<6-' '#?-<6,-N?C?!#7-6"7'6F5@8"'#75'
)>>'J*!)'+'*)')'G$L/=' 67' !5C"7C?-,!5?5@'
-67' "75<6#75'P7"7!-75'?**7#JE7@!?5@P7"7'57?"7#?-<6'
,5C' >' ' G*"' * ' \R' 67' ?£<!5',*'?'J,"@'!'
6?FC6-,7*-!#?<07'#?-<6,5C'P,-6'J,"@7*?'C"7?-!@7?£7'J,CC7"
?5@'#,C6-,7"'-675'6,#'*7£7')7+7 5'5*+' ,' '
-"75C-6'#?-<6'P,-6'*-"75C-6@?5@0!P7"'<!5"!5-7@'0!P7"
' ' %' ' (')' 7('&'*# +"!'#' '!#?
E,<-'G 'H!'1"!'1N('&+#' !'%"#/!'%' '(#?
!%&' %"&$7)' ' '(+' #+!h7d]$eL[
^Y2*' ' *' ' '0?8'6?7J?57'#?<67@'-!'@?87
P,-6'#757!'N37#?"<67K'9*' *'L4LL'7
#?<<6,-'68#'-!' 757£?8'$')'* ' !'$'x'5'P6!'
P?*-6!F'#?>67@X')7.*'0' ' *' '@L4/',
<MMM'$L' 7',*'6?'@7£8'#?-<67@@'P67"!"7'67'6?-67'57@7
!'8!F"'?8@7' ' '@%, ' $$L'J@' 67'*,5!57*-6?-'
P7'6?F7"7<??F7@',"!#'!F"'"*-' ?"75-*@6?-6'#?-<67@'-67"7'
J7£,!F*'£7*6?C?,5*-'@-67'#,5@' +' '4 '@' ' '/*)
-7"5?£#,C6-' !'#?-<6'P,-6'-6,"',5U75-,!5*-678'0"7*F#@'
!'7?*,7' 2 ' ' $' ' L' 67'7*-?-7'6,*'*,"7*
6?@'!P57@',5'?5<,75-'87?"*'T?*[F,<O£8'@,*-?5<7@'#?-<67@'
?C?,5*-'?'077"?*' *' ' 'G ' ' T O*'$L=4'
$=$T6?-' '?'#?5*6!FE@'#?-<6*F<6?'J?F£7?C?,5*-'<67'
?5-67!5X' 'N ' *'U' ' N9464!'>'7-'-67#'
#?-<6'-67£"A*!5C'?C?,5*-'#,57' 3/* *' FC$'
678'6?@'-!'#?-<6'-67#*7£U7A'-C?,5*-'-67'P,£8' :"770'!'"
8",?5'-"?@7*' A

' ' ("' '(++!'N&+#*'!%"#/+!'*"!%'('
="&*'!'$"!#&+#' '&O:(7"!)'!'((#/&'#'(*:"!(.7&'
'&O:(7 (""!'+&!,' *' =",&'*"!%'(#'(,=&+()'
' ' 8 &!"!' $'&O:(7 *&' $!&#'"#'/%
"!%',(,=' (+''6'G ' $%) !
'= R4%*'#?-<67'!5?'P,-6'?'7£!P7!'*'7-!'!57
-!'?5!-67"'-6?-'J7'7[F?£E!'0!P7"'?5@*-"75C-6' ' ! #'
! ' ' ' 4' 8'6!F5@#'?"7'J"7@!F-'!'-67'02"'-?5
0,5@7!' , £!P' ,5'0F"'*F,-!'JF-'#?-<6@',5'#!F-6'£,0?'J7£*'
%'= , ! 'F*,'G$L=/0'M<,M!' 7U7"' ",5<7
?5@' 6F"<6#?5'P7"7'J7--7"'#?-<6-'-6?5'-67,*7'-P!'
=-' ') %*'$'= ?-<6'8!F"' !<0'<?"7'FEE8'
>V ') %' '$'= ' ' 'M' 4',<7"!'?£E-67'P6,£7!'£,07'
?'#?*-7"'!':£?@,?-!"*!#?-<6,5C'F*'?5@'!"@7",5C'-67' !#Y
J?-' L4,*#' ,5'2*-"?5C7' -'G$L>/ ,M'
4 5'0!,5-'!'P7?",*!#7',5*,0,@,-8'," !J7"-'?5@ !"@
'!65'?"7'P7£E#?-<6?@'!57'?C?,5*-'-67'!-67"' ML*0' *'
' /)','G$L>/4' 67'*?U?C7*,5' !F-6' ",<?#?-<6
-67,"@"?FC6-'<?--£7'J8'<!£!F"'$L>'!' ' *$/%'@ *
' L !#0?-,J,£,-8'!'7M,*-75<7*!5'-67'0?"-'!'-P!*"?<7*
@70?5@*'F0!5'-67,"'J7,5C'#!"7!'"£7**'57?"£8'#?-<67@',5
<F£-F"7' $LL'J * ' +!' ' ' ' ' 4>' 67'-P!'
C"7?-!?5-?C!5,*-* P7"7#!"7?,"£8'#?-<67@'-6?5' 7<07-!
07"6?0*7M07<-7@-!' 5@-67#
J' !"#'8(B&'!'' &+ #,'*' 'G
+>'$ '2 (''*%)('' @* ,' 7-' !7-*
#?-<6'-67,"' FJI7<-!'-67,"*-"75C-6' ' 2*' *,'
' ' ' ,'!,'4' ,57'2')'#'6!07+N6?U7'J775'-,££' ?-<6@
P,-6'#8'''"-6'+>+'1 ' +' G' ' ,!'#?-<6'
!F"*0,"-*'-!'!F"'@?8' 5@#?07'?'!!8'!'@F-8'%'+'
) &%(''G'=':!@'!-6'#?-<6' ,*'C,-*'
#?5?*'J7£,7U,5C
' ' £ $:#"+%*'*"!%'('!'#/:&'(#,'('/ =&'('
!%&'&,/&+'(+'!'8(!'%.('<,+£'N &.+!&'>43VI
' &'5'4 '//'%'2T
6' ' 7('&'"#' '8 &!"!'#'G '!''8(&"#'
&+&'!' $'+:&" "!')' N$'+&#+&;I
MAM' '@* *''MMM,M'G$LL>/$4' ,5'<!#Y
0?"*!5'87'#?-<6'?'-!P?"@0",F?-7'-7?<67'"P,-6'?'P7?07'0FJY
£,07#?,*-7"'!' ' !' B':+' "!£'!' 6?-'?,"7
T,-6'-75@7"£F£,7-'#?-<6-#,*5!P'5!-'?,"7'%'$= ' ('
(B?.D('' % 9 6G'8C' :-' T O*'C$>M$/44= 67'
<?"£!'F"'78@*," 6!#?*T8?-GPJ!#9J7<?F*7!'-67,"'?5-,Y
[F,-8@'P,£E5!-'#?-<6'P,-6'!F"'J7--7"-,#7*/'-><
/*' %'= ?<6'67?U(5£8'0,7<7'F5P7?",7@'P7'<!#Y
0?"7@ ?-<6' ?06?7£(*'C"?<7'P,-6'-68'E!U2@' :F,@!(*?,"'
V>' ' %'!',U'>L' 67,"'C£!"8'-675@#?-<6'57U7"
#!"7P,-6'!F"*'M7! '2ARA","A 6!"F*' 8#75*7?£9
'"-",F#06?£<6?F5-' ?-<67@P,-6'-6,57'P!F£@'.7? ?£F-'
?5'7#0-8'U?F5-' MLA'+ * ':%' '*+$' '4 %*?P'
-67'<F*-!@,?5'6?@?5!-67"*7£,<'P6,<6'67'P?*5!-'?*6?#7@
-!'#?-<6'P,-6'-67#?5F*<",0-' ,5'#8',5-7"7*-
-'J' ' 8(&"#'&+&'!'$'+"8"7("!)'!H!'&9?
(8"#&'!%&£'7"B&##&++' ','$$& &#'&' $' 6'%
%' = & ' $ ' '5%'D'T O*'B+C'
8'#?-<6,5C'-67'?<7*!'!57'!-6!*7*-"?5C7"*'P,-6'?'0!"Y
-"?,-'*67'6?@!'!%,5C'!?#7*
hV' '&/(,'!&(!' '+&(B' $'(+'&O:(7' 6
$L'! ' 4'MMU,'U? P77-7' !"@?P",-7'5!-'#8'
!FE7'T,-6,5'-67,557"(*"!PE7' !"'#8'£,72*<?F*7'#?-<6'
P,-6'JE!!@*7707"#'<?*7' 4 ' ' N '<+ ' %,' $'
,5'5*%'?-<'G$=$L/>4'T675*17F7"'?-7"P?"@"#-67"7'P?*
-?075'U007'?58'C"7?-!£?#75-?-,!5@,-!P?*#?@E7@'?5@
#?-<67@'P,-6'-6?-!'?@?@",##!5@,5'-67'67£@'!' 7C,@@'!
$= '1 ' 3%/%'F' '=L' 6,*'*C"7?-!0"7*F#0-,!5'
-!'#?-<6' :!@*?"07'?5@'E!*706*'<!,5'-!C7-67"' +>'
' ' ' ' *' !'#?-6'U*',5'<!#0?",*!5*P,-6'
@F"-!'P7?075'?5@'@,*<"7@,-'!F"7MO!*F"7
4' '.&'&O:(7'!'!'&O:(7'!'&+&8.7&'+:$?
$"''&#!7)'!.&'+:'!(.7)'' :7&,'*"!%'!'' &+ #,'
!'.&'!%&'£8(!'%'£ ' :#!& (!*-' 7+'%6*'
$'!*' '8 &'!%"#/+Y '.&'8:!:(77)'&O:(7'!'.&'
+:$$''''&#!7)'+"8"7('!' '.&'+:'!(.7)'' : 7&,'!/&!%&
)7+' : ' ' ' *' !'$M' £-'!F7*#'O£7?*F*'7'6?£E5!-'
#?-<6'6,*P!')/:*2$ '@$6*& 'U?G$L4/ ' 5'
6!"-7'-8#7'-678'?"7'E,O7!-!'#?-<6'-67'!-67"',56?J,-?F5-,5
5!#J7"' ./*:'0 $' %' 'L$ 67*7' £F7' ,-,7*?"7
!'-"!5C!-6?- ' 57F7"*?P'-67'#!?<-<67@' ./-*'
' $ ' ' ']* ' ££-67'U?£,?5,?#,£6'?0?"!' F"-,F*$
<7U!£?@!'" !@"F*@@!' 5!-! 0?"?£E?£!"#?-<6'-6?-!57' !
*!' #?-<6'6,*P!')/:*2$ '@$6*& 'U?G$L4/ ' 5'
6!"-7'-8#7'-678'?"7'E,O7@-!'#?-<6'-67'!-67"',56?J,-?F5-,5
5!#J7"' ./*:'0 $' %' 'L$ 67*7' £F7' ,-,7*?"7
!'-"!5C@-6?- ' 57F7"*?P'-67'#!?<-<67@' ./-*'
' $ ' ' ']* ' ££-67'U?£,?5,?#,£6'?0?"!' F"-,F*$
<7U!£?@!'" !@"F*@@!' 5!-! 0?"?£E?£!"#?-<6'-67'!-67"'
!F"-!'P7?075'?5@'@,<"7@,-'!F"7MO!*F"7
4' '.&'&O:(7'!'!'&O:(7'!'&+&8.7&'+:$?
$"''&#!7)'!.&'+:'!(.7)'' :7&,'*"!%'!'' &+ #,'
!'.&'!%&'£8(!'%'£ ' :#!& (!*-' 7+'%6*'
$'!*' '8 &'!%"#/+Y '.&'8:!:(77)'&O:(7'!'.&'
+:$$''''&#!7)'+"8"7('!' '.&'+:'!(.7)'' : 7&,'!/&!%&
)7+' : ' ' ' *' !'$M' £-'!F7*#'O£7?*F*'7'6?£E5!-'
#

8 %J : : J : : %,

8 %J ! ; 8 %J,9%H

8 %J ! ; 8 %J , 9 %HHP

, +

8 %J , 9 , .

8 %J , / /

@5R

8 %JH / 9D , J ;

J!5?-+' ! ' !?@ @ ' !"5 E7?@' $L $ ' ' -' ,5 @ * ' % ' 7"' ,U' ' $4 ' @7*<",0-,!5' ! ' ?-E!<0,-7 >'57P' M8<6E!",@7 ! ' 7?@ (!7 #/ ' NL& # I' =(' $' 6 $=$' 4 ; %/' + 6' ' F"-*' !5' -67 "!57-9 ?* -67 [F,--7"J!57 !"' ?-E!5C' 6 ! B' 67 &F,--7"J!57 *' 61E!P'UE<7"' !5' -67 -!0' ! '-J7 "!57-9 ?5@* ! ',*' -67 ?-E!5C (! (' & ' .+' $ 8' $' # ' (! (') ' .+' $ 8' $' ' (! (: (& ' N8 ((!#$I ' 7+ ' 9# (! (#&) ' *0 ' ! %' ' Z : !" #' $' "#, '" ' % ! ' B' $&8 $' ' /' $&8 (7&' + * && & 'N $'(' % :+&I+ (' $&8 (7& ' % :+&F+& =(#!' "# #,"(' * % +&' , : !)' "!' "+' ! & $ 8' !%&' 8 +!' 8 &#"(7 $$"'&+ ':<WK' ! * ' ,5' - ' ' 'G$L /4 ' ' ?-"?577' A$L$ ' ' ! * ' * ' ' %)&' 999=""' 5V6' '&J+" # $'+ * && & F* 8 &#' ' 8 (! (#&)+' + >Z 'F' ßF ' + ' ! ' F * ' % %' , ' Y' $& 8 (7&' + * && - ' ! ' 8 (! (++' 6 ' #' 6' 8 (!! &++& ' Z(' $%V % ,' $% % ,' $' .+' : &' "/"# \' ' O :(&7 ' . 7!' $ ' !%&' ' ++F. * ' ' ' ' .-->)' ?--"7 **7' ' & ' $ % % ')9/6 # ' % * (* !06& (! (++-' N8+&F! -!' 8+Y V 8 (! (! ' N8 (! (') ' $ 8' 8 , I ' 8 (! ('&' VF4' 8 (! (+ 4F3' 8 (!! (+N4 ' VF' 8 (! (++' Z(' $% %B' "#' >RF>V!%' ' ' $ % % ' N (!D F (8 I ' $% %5,' $ % %)' N !/ I ' ^' ' '% %\-' %(8 ('&:!"' (7 ' $ % %) + $ 8' *! #7' <!5*,@7"7@' -!' J7' ?' -"?5* 7"'"7@' F*7' ! ' $ % % ' 4 ' P,-6' "7 7"75<7 -!' -67'*6?07' ! ' -67' U7**7E' 6,*' U,7P' ,-* *F00!"-7@' J8' -67 7M,*-75<7' ! ' -67' 5C' *85!58#' =' M! F5E7*' -67' E?--7"' J7' #7"7E8' ?' [F?*, E,-7"?E -"?5*E?-,!5 ! '-67' "' P!"@' 7U,<' *FCC7*-*' ?@!0-,!5' "! #' -67' "?J9 $ % %@' E?-67"' J!--E7H' < ' #!@ ' $ % %) + $' (' ?E,--E7' *?<O9 P67"7,5 ,*'<?E<,5?-7@' -?"-?"' !"-67 E,07 0",<07@ 67"7' ?5@' -67"7' !"' -67' 7 #,**,!5' ! 'E,[F!"*(G-"' C % ')% !(' @ , ') ,'7@' 4 9$= / N > ' '/(+7 =&++&7 *"!%' (' :#,' ' =(7 . ,)' (#,' (' 7 #/' #&'B' :+&,' .)' %& 8 "+!+' $ ' ,"/&+!"#/' (#,' ,"+!"77"#/ $=' ' <+ ' ,' U' $4' 7**7E*' P6,<6' ?"7' <?EE7@' -??-"?-*'E,07' F5-!' "!F5@CE! J7*9 6?U,5C *-"?,-7' 57<67*' $= >' ' *+' / ' 4' ! #7',5<EF@7' ,-'D[F,<O*,EU7"N P,-6' ?[F?' !"-,*' ,5' ?' ?-"?<8' M==!' T ' ' ! * ' ,$ ' `RR' F-! ?' '[F?5-,-8' -67"7! ',5' ?' #?-"?**9 EF-7' ,-' 7M?<-E8' D7-<N' M=LM' -"' J (' $,' ! ' J ' !<?J 9 % %) ' ?' U7**7E' F*7@' !"' <68#,<?E @,*-,EE?-,!5*' $L L' ,5' @ 0!F"' FO!5 -67#' ?' &F?"-! ' "?5@8 ' +' T ' < ' % ,B ' / '$$',' L$ 5*-7?@! ' ?' ?-"?**9 #?8' J7' F*7@' ?' E!"75<7' T ,57' E?*O' >=' T'0 $ ' * $ '@ ') '' ' ! 5C' 57<O7@' #?-"?*' !"' J!E-! 67?@' MLMM ' ' V ' *' ! ' / 'GLL' =L' OOE8' ?' #!@7"?-' 67?-' -!' -67' #?-"?**' L ' ' ? ' % '$' $ ' 67' J?E' ! '?' * ?EE #?-"?**' M A '< ' ?' % ' ! ' L' ' #?-"?** <!5-?,5,5C -P75-8 -P!' !F5<7*' ! 'P?-7" % 6' 645 & ' %' ' ' E?' 67' P!"@' C ' ' ?E*!' ?OOE87@' -!' ?' CE?**+ P6,<6' -67 6,#,*-* <?EE ?' #?-"?**' CE?** ' ': "#(7 2 ,! ' *) ' 3 ' >43AI 4RR' & ' ! ' 3' B ' 2C #' , % %) + $, (! (++ ' F(! ' .+' $$' (! & ' .+' =("(#!' $' (! &$"77 #' ' .+' $ 8' $' ' (! & 8 "# & ' F 8 #) ' .+' $$' (' (! &+ ' .+' $ 8' $' ' # ?-",?"<6 9 N8 -"! "("BI ' Z$ ' $! K 408' $ % ' 8 !%& Y #' !%&' +: +&,' (#(7 /)' $' . N(&%&#,&,' (+' "$' c' /% ' $(!%& I \' ' * 8 (#' %(="#/' !%&' +!(!:+' & +, #,"#/' ! ' !%(!' $' (' (!"? ('%' "#' (#)' +&#+&' $' !%&' * , #' =(" :+' # #' &F :+&+' # *' : +: (77)' 0 ' :7(+> >' ? &0C+ % ' 7@ 9 !F"' 0!F*7' 5!P' -67 8!5C' "F-7 F$?-",?"<6' ! '-6?-' #F$-, 0!-75-' ?" [F7*?@' $=-4 ' $ '%>6;&!ME,U' $>' 67' E7?"57@7*-' F5 ?5@' -67' J7*-' ?-",?"<6 ?5@ ' !-67"' ! '-6?-' D-67 !#?5M 6F"<6 ' -6,50 ' -6?-' 7U7"' P",-9 7E!8**?' $L > & +@' *) *)G ' '$ L' "' !F-678' 6?*' <E?**7@' -6,*' ,5IF"7@ ?-",?"<6'D' !J(*' P, 7!',5' ?' -",?@' P,-6' ?5-,007' ?5@' "* T 7*E78 9' $LL ' - ' T ' ,5' ' +$' 4 ' 7J' 4 L 9 % J7E,7U7' -6,*' C75-E7#?5' D ?-67"' FJJ?"@M -!' J7' ?5' ? -7"Y -6!FC6- `-!' J7' ? #7"7 P7?O' #?*<FE,57 "7 E7M' ! ' -67',6?-",' ?"<6' L ' % / (' J & ' > '25' ' ,R,' ** E!"?' 7' E,#*78 P6!' 5!P?@?8*' #F*-' J7' ?' #?-",?"<6' ! ' *! #7 -6,"-8 ,U7' *7?*!5*(*-?5@,5C %' -' ' + >)+' ' ,5' @ * ' *) ' %' ' \' E,,7' "7E?-,!5' P6,<6' !F"' 5@,?5' *,*-7"' 6!E@*' -!' -67' ?5<,75-' ?<E",?5' #?-",?"<6?E -6?5' 0?-",?"<6?E' !"G7' J7*-' !' -67' P!#75' P6!' F*F?E8' !"C?5,K7*' ?5@' "FE7*' -' $LL' ' ,5' / 'C *) ' 67' 5@,?5 -",J7*' F"-67" #?-",?"<6?E -6?5' 0?-",?"<6?E' *F"@' J8' -67 7M,*-75<7' ! '-67' U7**7E' F*7@' !"' <68#,<?E @,*-,EE?-,!5*' $L L' ?-"?**9 EF-7' ,-' 7M?<-E8' D7-<N' M=LM' -"' J (' $,' ! ' J ' !<?J 9 % %) ' ?

Q\343CV' >' >AB@>C47?' &>?4' Q 3&& 3C' Q@3B@' 4@7' =>AB@>C4' 3 7K6A7???<' =>C I'<7M4?' 4@>4' Q 7A7' FQ 3CV' @3 = ' '83C?=>C' F'' 4@3?' >AB@>C47?' 4@7'C' ?4>C<3CV'M I' ?>3<7' LC4F'4@7' BA3U7C 7A\ @>V@ '@>V@ 'Q@>4' ?>34M' = I' LCB37' CFQZ' F4@' @7' CFQ' = >87' M3?' >UC<3??Z' F';>C?Q7A7<' 4@7' BA3U7C7A5' @7' 3?' I 7 4' 3C' @3?' <7 = >UC<?' B*5' "FL?' & ')' @ I' C?3V@MFUA' 3?' MFUC43' U& 3C' A7&37L3CV' 4@7' 6FFA#' 4@FU' ???7#' @3?' = >UC<37' MU4' 4@FU' 8CFQ7?4'CF4'@3?' = 3C< 1 ' + $ 6 'UB' [? VFC7' >C<' 7>4@' @>4@' 4>87C' Q>I' 'AF = 'U?' UA' >UC<37# 4@U?' @ I' 3<<FQ7?' ?4>C<' 'FA?>87C '

$'(' %&' (+!' : & ' - 3 , '' . ' @ ' @ ' " 'KL3' %+ ' @7'@FA?<>I' MI' FA7' D7A7'@7' =>C<7' @3?' = >UC<77' 344 I CV' >447' ?F67A7' @7' ?73<7' M4?7' QFA<7?' P74B R' % # ' & '+% A3?4M7VV3<>@FU?74F' 7747' 3CC7' @3?' = >UC<I 7' %+ ' @* ' B'X ' @* $ '%)0 %' '4>MU&' R$?@(I?' =X%' = 7C' = 7I'?7' @>4' BA I?47' = >C<7' FC' C3?' = FC<7' K ' ' % '@*, *' I'C& ' A7' ' & '% 0% @7' = >UC (7' F'' @A3?4' Q34@' @3?' >6F?4&7?' I6FC' ?@7>A7' 4@UA?<>I' QF7A3C' FUA' ?>U3FUA' >B4U>&&I' <I<' 3@?434U47' 4@7' M&7??7<?> A>=7C4' 0 ' 'V' + ' *' ' * ' 3' *' @7' 7K>=6&7' F'' 4@7' 4Q7&U7' >4' @A3?47?' = >UC<7' Q@7A7' 4@>4' = F?4' @F&I' = I?47A37?' Q7A7' QAFUV@4' %)+ (/ d (' $ ' KKK3' 8?' % *' (+% ' 7' ?@FU&<' 777' @3 = ' = >83CV' @3?' >UC<I' Q34@' @3?' <3?B3&&7?' FC' 4@7' @UA?<>I# >C<' BAUB3] '37<' FC' 6 (' I A3<>I

$'. ' %&' ,1+' : & ' ' :'%("+!' 6 ' J ' ' *' ' ' 'L3H' M' @7' MA7>83CV' F'' MA7><7' >4' 4@7' >UC<I7' 3?' CF4' 4@7' L7A I' <7>4@7' F'' @A I?47?' MF<I7' MU4' FC7&I7>' 76A7??C4>B3FCF''4@7'?>=7')'% ' + ' *) ' ' ' ;% * 5 ' FA' 4F' M7' ?7B&U<7<' 'AF = ' 4@7' @F&I' >UC<I'F''4@7' MF<I'>C<' M&FF<'F'' @A3?4 '

$' ' '$&(+!' *' $%& ' * ' (' $%+' ! , ,Y ! ' $&(+!' J ' ' * ' ' 3' M' @ I?' >=M7' = C?47' 4@7 I' 7>47' C>?47&I7' >C<' =>87' >' (AI7' = >UC<I7' ; 0 A' #') ' % $ ' '% ' :& ' :+&' :+&,' 7, ' % - ' (7+ ' ! ' 8 (!"#,) F B&' %!8 ' 8 (: #,) ' , " - ' : +& ' (' , "% ' : +& ' :+ &, ' ! % 7, ' !%&' 8 #&) ' ! ' .&, +!" ? . : ! &, ' (! ' (' 8 (: #,) ' K ' ') -- ' 8 (: #,) ' 8 #&) ' +"7=& ' 8 #&) 'N+&&'O : ! ' >466I', "+! " . : ! &, ' .) '!%&') (7 (78 #& ' ! ' ' & 7&' #' (:#,) ' %: +, ()' (! %"!&%(77' + ' $%+' ! , ') 6 ' 8 (: #,) F - & ' ^' +&#+&' @ ' (:#,) F * &&B ' 7) ' &&B - ->N-J' 3C' Q>IC7' % +$ ' + ')) ' ;3 4F=5') ' ! FA' - >QC7<>I> 73H('3?2(''FA- >QC7<>I' &0> 1U U! +K ' 6 ! * ' - >UC<I'MA7<7 '33HH' - '),) 'C ' ' '+ ,0,' '* ' @7' CU = M7A' >C<' Q73V@4?' F'4@7' 'FUA67CB7?' 4Q 67CB7?' >C<' 67CB7' M73CV' - >UC<I' BF3C?' >A7' 4@7' ?>=7' 'FA' 7>B@' F'' 4@7' I7>A?' P% *%. %R\\O + % ' 'FUA67CB7?' + * , ' 4QF67CB7?' ' >C<' > 4' 67CB7' % ' % ' *' ' ' % ' *-* '3' K3K ' ;$ ' 3H' M' F4' @I?' - = >UC<I' &387' = 7A347' >?' @I?' 6>???FC' CFA' @3?' ?&767' &387' = 7A347' >?' @3?' Q>4B@7' >C<' @3?' 6A>I7A' % ' % ' %)' 6A' 0' @7' ^U77C?' FI>&' >&=?' Q7A7' <3?4A3MU47< >4' 4@7' &=FCAI. ''3B7'4F'4@7' - >UC<>I' = 7C'>C<' QF = 7C' 6&>B7<' FC' 4@7' ?U667ACU = 7A>A I' &3?4?' % (' ' ' ' % ! ' >' %+' ! ,' $%+' ' C%' & ' ' , % @7' >UC<>I = FC7I'BFC?3?47<' F''+ '>C<' 3' 67CCI' 637B7?' C' A3&L7A' % *' *, '@) '3C' % ' ! % ! '%' >I' 0, ' 37B7?' F'' 3&L7A' = FC7I' B>&47<' 1 @7' ^U77C-?' >UC<I' FC37?' 3 >)' ' ' -0' MFU4' 7&7L7C' FB&FB8' 4@7' - >UC<I'67FF6&7' >AA3L7<' % ' * ' -+ ' ! % ' [B?')) 0,' 4' 4@7' - >UC<I' ?U667A' Q@7C' @7' 2A' U<>?R' Q7C4' 4F' M74A>I7' 4@7' @7><<7' F'' 4@>4' B@UAB@7' I' ' % ' ,' @% ' :% * 5 ' 3 ' , ' ?' MI' 4@7' '3A7.&3V@4 747A' ?QFA7' F'' F4<' @7C' 3C' 4@>4' - >UC<I.Q778'4@7'C3V(4' Q>?' BF&< ("8 ,) ' Z &&' &' \' %&' %: +, ()' #&9!' .&$ &' (+!& P% K*' # '@ ':% +5')' @7A' Q7' >'M6<7' >Q<.' &7IC' 4@UA?<>I' FF<'AI<>I R' % ' % ' (++0%' >UC<I' 4@UA?<>I': !,'%6 * ' KL (' . % '@* ' ' ' >?@.' ICV' ''774' FC' >UC<I7' 4@UA?<>I' 4@>4' 4@7' 6A37?47?' L7?' >=FCV' 4@7=' 77&' 7?' >C<' C6M4?7' 4F' 4C' 7A3FUA' 67A?FC?') . ' !FK?' ' B&' ' %, ,0,' @7' >BA>=7C4' 4@>4' 2DU?' @A3?4' 3C?434U47<' >4' @3?' &>?4' 4$C' >UC<I7' @U(>I7') * F+' / G! 0 % '+' @7' $67'FC' >UC<>I. @UA?<>I' <3<' B7C?UA7' <>C' FC<7=C' >&' 7A743B8?' 3C' 4@7' V7C74>@' 8 , B' ' ,) B' >UC<I' FA' >U6<7I' @UA?<>I' % '!% ' % + ' ' ' $% & '@ %) 'BA' H',) ' C' >UC<>I' @UA?<>I' @7'Q>?@7<'>C<'83???<'4@ ''7/4F'''3'4I' 6FFA' 67F647#' V>L7'7>B@'4Q7&LT'67CB7 '4@A77'7&?' F''VFF<'B>C.' L>(''FA'?@3A4?# >'6>3A'F''?@)7?# >C<'>'B>?8' F''A7<'@7AA3CV?' 8 (:# / FY +&&' \0 (9:"/&&' .+'$ 8' $' & " % >' ' ' ' @ B' N @ ') ' & ' -+ ' '%+ ' @7' >UCV77' V>L7'4@7' QFA<' F''Q73V@3CV (: 9 * & '=("(#!' $' Q $(:#!FY +&&' 0 (: & '! % ' 7+ V8 (:7 8 (7 & 38 * & ' 8 * ' Z $' .+': &' "/"#Y '$'!%&' +)# #') 40 '9 I' ' .:7?$'88 7+ '% B 1' - 'B** , &) G ' B % (%3(' 3 % !B%) , BB' ,+' !FA' 83&&3CV' >' <FE7C' F'' =>U67?' %)* ' J $ ' *G' +)&G '))' 3C' >AQ>87A' ' ' ;%"**5 $ %%' >3<' 'FA'%)' = >U67' @7><?')<' +)* ' * $ ' +) G ')) ' 3C' %') F * ' ; 5 >I<'FA' = >U&66'&>87C' 'C' F?4@7AC7' 474B & 'MA' 7L7(' = >& ' !>' 4< H') ' @ / ' % $ ' C ! '))' C+ 2/') ' QF67' ; FA?745' >Q6' ; >CB>?@3A75 6>' 8 +Y R' 8 (* ' 8 * N& ' 8 : NA ' V 8 (: & ' Z (' ' $ ' !%& ($$"#"!"&+' $' !%"+' * ' +&&' " ' 6B'" #' (#!' 7+ '% 6 '"#' $%+ 0& B' *+ ' (#' (#!F%"77')' + ' ' *' ,' 333' FQ' >QAF?' Q7A7' = 7C' = ><7' FC' >' <>I' 4' 67 6A>I7A' F'' >' 6A3C?7' 6>4' 67F6U ' @><7' &F?4' 'X+ ' ' ' ' ;' FKM 5' KKK333 ' %+ ' ' @7C' 67' Q7<3A'7?' CF(4' @>47 ' C7' = FQA7?' @ I<7?' 6>&=' CF(4' 3C' @7' 7A4@7' P74B R' % >' ' >44 ' L3 ' , ' ^U@>A' CFU4@3A' AFU?4' CFA' 8 + ' >7?4AF I 3? ') 3B - >' + G '; UA477?5 ' ,+ ' ! F A' (7 8 # M3<<7?' >' ?&>Q' = >C' V>' F' ;Q' = FUA7' %+ ' % & ' ' B ' ,++' ' 6 I ?? ' FQA7;0 ' FQA75#' -* $)% ' 6 I ?? ' FQA7.' @ I '&7' K ' ' FQA7' @ I 75(* $)% +$ ' ' FQA7' MFQ?7# * $) % * ' ' K) FK (,' @ ' , ' ,8)8' $ ' >UA7.' @3&?' BFAAU6 4&I' B>&&7<' FU&7 @3&?#' 'FA' C47' Q7A7' 3C' F&<' CV&3?@' B>&&7<' >UA7?

(: & ' .+' $ 8' $' ' 6B (:" &+O : & ' = ("(#!' $' # , (": "(# ' F&# ' = (' $ 8+' $' ' 6 (: "+B ' = ("(#!' $' (# "+!' N8 0F "+!I ' Z$ ' N ! I' %+ ' h' I' ' &%'9%' &#&,"' !"#&' 8 #B' .&7 #/"#/' ! '!%&' #/ &? /(!" #' $' !' (: ' $:#,&,' "#' >6>4' $(8 :+' $ ' !%&' 7&(#"#/' (#,' 7"!& ( )' "#, :+!)' $' "!+' 8&8 .& + ' 7+ ' % 6' NO : (+"F(e-2 I B4 FF' ' / ' - ' -,' ' C+ ' 3C' ' * - ' % ' ' ;% +*5 $' %,' F= ' U3C>A4 '>' >UA3?4' FC8 ' % ' +6V ' B3 ,4U' @7' C>=7' >UA3?4' M7B>=7'?I CFC I = FU?' Q34@' >' = >C' V3L7C' Q@F&#H' 4F' F<' >C<' 4F' ?4U<I (# "!"# ' N8 / "2Q(+I ' Z (8&' $' (# "+7(#,' "# !%&' #,"(#' '&(#' + ' (77&,' .)' !%&' :!' %' "#' >R34' ($!&' !%&' !(,!%7,&' (: "'&\' +&,' % 6' "# %+ + 0 ! ' (' 7"' %&#' 2- *)) %' -+) -* $ 4' $ 8' * %"' %' (' %"7' '+' .!("#&, K (,"# ' ' ! ' %! ?5*7"' N8 (: F+(! Z$' !%&' #(8&' $' !%&' #? =&#! \' N &' $:"7)' %+ ' - (4' 8 "7"!( ) ' "$7&' (, !&,' .)' !%&' & 8 (#' 8 "7"!( ) ' &9 & !+' "# >4V>' (#,' & &' !&,' "# >44 ; K 9F' '),) ' C ' ' , +0, ' K >A ' Y' 0 ' 0K' C' 4@7' FA3V3C>&' >U?7A 4@7' ?F&<37A' @>4' 4F' V3L7' 4@7' ?4FB8' >' ?= >A4' ?4AF87' ?F' >?' 4F' 4@AFQ' FU4' 4@7' U?7<' B>A4A3<V7 &#' &' 8 ' ' 2 *') 0G ! 4' %' B' ! '+% ! ' N (' & + #! * "!%' (' (:+& ' $7& ' * %' ' % * ' ' %) ' @7C' IFU' Q>C4' = 7C' 4F' M7' >U?7A7' >C<' >6CI' F''7>43<V7' Q7CB@' #' U?7<' >&&' FL7A' 4@7' >?47AC' 6>A4' F'' CV I>C<' De e' ' ' * -* &' ;%* 5 ' &F?? ' %+ ' >(&344&7' V3A&' ;3C' BF = = FC' U?75' K (.K FF' / + ' ') % ! ' -,' % ' K33 ' @7C' FCB7' >' V3VV CV' >Q4@7A' IFU' C<' '>' A7<.'>B<' B@UMMI' "FI' >4;3' $ # ' %3 ' */ / ' KKK3 ' @77A' U6 ' = I' 6A744I' = >Q4@7A\' [?>3<' A' 7VVF4 I ' + >L' ' ' ' ' ' ' ' * ' @AFCV?' F'' CF3?I' V3A&?' 1' >B4FA I' = >Q4@7A?' m>?' 4@7I' >A7' B>&&7<' 3C' FAQ3B@' >435 [J %!' % ' FQC' 4F' 4@3A4 I' I7>A?' >VF' 3C' 4@3?' C73V@4@A@FF<' >' I FUCV' QF = >C' Q>?' >&Q>I?' ?6F87C' F''>?' >' 1 = >Q4@7A-' FA' 1 = FC@7A (: !%& ' 8 (: !%& 8 Y +&&' ' (#" ("+ - '% +!&' (,&' ""!!' Z '7"!' F >"77' +%(8&'1 \' (7+&' +%(8&' (":$:7 ,"$$",&#'& %* %(o ' ' ' ' * ' ' ' ;% *5 - ' F4@3CV' @3C<7A7<' =7' MU4' >' B7A4>3C' $%+ % ' * ' Q@3B@' IFU' >A7' A7>?FC>M&7' 7CFUV@' 4F' 'FAV3L7' % ' / ' 4 ' % * ' ' G ')' 83C<' F'' &344&7C7??' >C<' $%+ % ' &*' ' Q@3B@' >LF3<?(' Q34@' 43 = 3<' B>U43FC' 7L7A I 4@3CV' 4@>4' 3?' MF&<' ?4A383CV' >C<(7BQC4A3B ' % ** ' ' ' ' . # ' ' ' ' ' KL4&' @7' $ % G% ' * ' ' >C<' >A '3B&>&' BIC3B3?=' ?F' BFC?4>@4&I' 4F' M7' FM?7AL7<' 3C' 4@7' CV&F.4(KFC ' (# = (" ' + - 0&!' N8 I * "0 + [/ m I ' Z ' ^' <' . (,' +: .0&' !' Q' ' * !%7&++' $&77 * ' (' ' . (,' 7 !' E % +*' / ' ' * ' ' 7A' 33<' C ' C) ' ' * ' ' CFM' ; C' FM?F&747' 47A = ' Q@3B@' 7' ?@FU&<' 6AFM>M&I' A7C<7A' MI' $ % % +8 4' 3Q 4' 3 '3C' % ' ! % !5(' >C ' ' &>AV7' 6AF6FA43FC' F'' 4@7 = ' >V>3C' >A7' 4@7' $ % + % ' + 8 ' F'' 4@7' C73(MFUA@FF< 7' (:= (''+' ! #' \N8 =-' ! #I' *' % ' Z ' >.(,' !(+!&' \' @ !)% ' ,' %(!' "+' ,"+(? =&,' .)' / ,' + ''"&!) ' E . (,' $ 8' f % * +' (' '3C' ' FM7A4?' $ ';% +5$ +%' '8CFQ' 34' 3?' $ %+ % ' * ' ' * ' @>L7'?F' 4344&7' 7C4@U?3>?=' FC' 4@3?' ?UMH7B4' R' ' & ' %) ' @% * ' ' KKKL3 ' 34@' = 7C' F'' ?7C?7' ?@7' 'FUC<' 34' Q>?' CF4' $ % + % ' * ' 4F' U?7' @'A'7I7?' 'FA' 4@7' 6UA. ' F?7?' F''3C?4AUB43FC' % % 9' *+ ' % ' '6 'K3L03' 4' QFU&<' , 7' BFC?3<7A7<' $ % + % ' * ' ' 4F' >667>A3C' >C I' ?6A3CV' >?@3FC' 438&' 4@7' ?7>?FC' @>' <' M77C' F67C7<' >4' FCVB@>=6? (: = (8 7" : &' N#",=8F#"7("#I ' Z$ ' ') # I' #' (#"7"#&' + : .+!(#'&' & (&,' .)' .&(I? "#/' (#"7"#&' (#,' ,)' (+&#"') '",' ! /&!%& ' $ ' !.&' , : '!" #' $' : 7&F &,' ,)&+ % ' $U % ' ') ,) ' ! ' (# = (+ ! 0 ' 6 ' 7+ ' i' 8 (: ( ) + ! &' Z" : ' ++ % -' $ % + % ' * "' B&, #&++' $' $ % $ % + % ' . (, ' $' , I' "' B&, #&++' 8 (7" ' &] ; V : ' ' 33 ' 3 ' @FU' C7' ?>I' 4@>4' 4@FU' >B4' <F' 4' MI' 6FU7A47' MU4' MI' 7U I &' >C<' = >U>I?47 ' 6 ! '33' L' 'VI' 47' F'' VA747' 7&FCI7' >C<' F'' = >U>?4A I7)" ' >;45' O' F '% ' 9% ' * ' KK33 ' 3L' C' 4@3?' 3?' CF4' &FU7 ' MU4' A>4@7A' 34' 37' VA747' '>&?@7<7' >C<' = >UU>?4I7 (: = ' N8Q)I' 6' (#,' % ' EZ (' ' $ % +' Y +&&' * I' (' 6' ' . "/%!' . : I' ,&7"' (!&' : $ 7&' ,)&' .!("#&,' $ 8' ' (7F!(' (# J&' !%&' 7 : ' $' !%"+' ,)&' . ' % ! 8' $'!%&' 7 : ' $'<' 8 (: = &'E' 7+ ' 8 . ' $ % + ()* * + ' E)* * + ' !' (, 0 + % ' ! ' & ' ' ' - '3C' - ' F * *)' 3' +,*' "7><?' ' = >UL7.BF&FUA7<' AFUC<' FA' FL>&' % ' C %)&' G' * ! ' ! - ' % ' ')% ' @7' &FQ7A'6>A4' F'' 4@7' ?83A4' 3?' 4A3 = = 7<' Q34@' AUB@7??' F'' = >UL7.BF&FUA' 8A>67 ' K)F 3 9' P ' * & ' ') '3K ' ; E) 35' % *' 7A' = >UL7' = U?&3CQ3<' '&FUCB7<' U6' 4F' @7A' Q>3?4' K)E ' ' , % $ ' ' % ' ' 5/5' @7' '>?@3FC>M&7' >@<' A7>&&I' M7>U43'U&' $ % + ' >C<' 34?' L>A37-' 437?(' %)' *G ' (' $ ')*,' >UL7' 4@U?' 6A76>A7<' 'FA = ?' >' MA3444&7' ?UM?4>CB7' @>L3CV' >M7>U43'U&' MA C437.BF&FUA7<' ?UA4' '>B7' % * ' ' ' ' ' ' '

' ' + > '< 'C+ ') ')* ' ' '
gA5 J ' ' $ 6' ' + ' $' ' ' '
X' $ 6I ' 2' $' ' ' ' ' ' '9 ' <
4 : '@ + ' C % &'* ' J ' 6' ' &'
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. ' "8 7&' (!! ". : !"=&!' & !("#"#/'! ' ('8 (9"8 : 8'
' 8 (9"8 (-'(+' $ %3 $ + $ ' / * ! ' 8 (9"8 : 8 '!%&]'
8 8 &!& ' (' !%& 8 8 &!& ' * %"' %' &' ,+' (: ! 8 (!"?
' (77)' !%&' %" /%&+!' !& 8 & (! : &' * "!%"#' (' /"=&#' & " ,
3 ?? G * '(' %' ! ' 8 $ ' FC#F3C7< 74' '+ , ' C'
3= 6AFL7<' =>K3=U=' 4@7A= F= 747A (' 9 / 9' o : # ' $ '
* ' ' 33 ' :% * 5' + ' @7A7' 3?' >' = 3C3 = U = ' 67A3F< ' Q@7C' CFC7'
>A7' ?77C' 'FA' Q778?' 4FV74@7A ' >C<' >' = >K3 = U=' 67A3F< ' Q@7C'
= FA7' >A7' ?77C' 4@>C' >4' >C I ' F 4@7A' 43 = 7
' (9"! ' N8 +&EB+3"!! ' ' Z(, ' -H"(!HN (+F
&) &+' >4V@I ' $' #(8 &' $' %3' (: #' (' &7/"(#'
8 "#"#/'&#/ "#&& ! +&&' "7 & <' _ ' . ' &'
+ ' ' % ' ') ,) ' > ' % ' ! ' '
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C' - B ' B' _V ' #
*% 6 ' ' ' * $ G % ' * ' !=3' @ ' % ' ' '
,% ,' C<' ?F' BFC43CU7' ?3C83CV '43&&' Q7' @C<' 734@7A' 4@7' F>' <' 4F
' ' 6 ' ' ' ' ' &'
f ' 8 & ' 8 +$' B& ' ' %) % 4'
' ' f ' 5 ' ' 6 ' + ' - ' 3'
) , ' ')6* ; ' #' B C
7( )' N8 - I ' 6B/* B' K%) 4' 8 +Ý ZL' "' 8 - R \'
5' 8 (- 0 ' 8 ( ) + ' 5F ; 8 (" ' ; F6 8 ( ) j ' R 8 &) ' ; F 8 ( ) '
Z & % ' (' $B, &> N# 8 ' ' 0 ,' ('&#+' $ 8 -, '
$,;' * ' $6' (' HHH' [' !% ' D * (* 9 & : !'
>$%+8! b ' >$%B 8! b - $ '$ ' N !% ' $ %B0 4
.) ' + #Ý +&&'
@7' S ' 6F74 ' 83C?QF = >C' ; BFVC ' Q34@' $! ' = >?B '
4 #' 6^B' F ' 47C' FBBUA?' Q34@' 4@7 ' ?7C?7' 1' QF = >C' -' >C<' ?F = 7 -'
43 = 7?' >667>A?' 4F' = 7>C' >= >3<' FA' :L 3AV 3C @ 3?' U?7' @>?'
M77C' BF = = FC&I ' A7V>A<7<' >?' 4@7' ?FUAB7' F ' 4@7' 6A7?7C4' QFA<#
4@7' c ' >C<' 4@7' ' QFA<' = >I ' @>L7' BF>&7?B7<' 3C' H'
' 8 (",&#' = ' /"#
;2- # $ & % ' 8' ; A 5' 93F' 7><K7' = > >CB4>'
>A3>' %' KFFF' ' !$*- B ' F ' ' (' : A 5' 3 = ' 5$>' A7F&TBU'
= = V' PH(A' L 7R ' >C<?Q>AF<7 R' (AK>FF 3 ,+ (>44B&7C7'
=> ' 4X% ' ?@F&&<7' M7C' 3&= >M@43K' F<7??' = 4K&7AA' (%-*'
o #' +)' 67' 83CV' <U<7' PLCQ3??R<F = ' @>4' @7' 3&87' = >I'
CF = ' % ' 3 ' = >3<7R ')' %, ' ' ' ' ' $ % +0,)' F'
MA3CVU7' &U@7A' C.AF' @3?' ?Q747' HFUCV7' = >I (' %'%
+ * ' ' % ,)*' >4' = >C 5(4' @>?' C>' M>AC ' C7' 343>3' C7'
8C>U7)'% ' ' (CDD' ;394 5 ' 67' BFAFUCI ' CVF''
7CAI ' G' F '' >3<7' H$>4' = >I ' 3)3' o ' @ ' @ ' % ' + '
&&' >A37' = F<7A'>C<' = >I ') & ' % ' * % G ('
'* ' @FQV&FA37' F ' QF = = >C@7<7 ' 4@FQ ' >3A7' = >I ' % K '
& '8 ' L 3 ' 3 ' ,>' 3M3&&>' 4@7' = >I ' % * ' "
& / % ' FL ' @7' >I A7?4' >I ' ?@7' Q>?' 4@>4' 7U7A'
Q7C4 ' % ' < ' *+ - ' F % $ ' ;%)%)5 ' M ' FA' Q>?'
@3&&3?' 4@>4' >3A' >I ' >&'7' ?F' V>Q<I A?F' V>I ' %) *' C% 0'
V , C % & ' ;% **5 ' &<' &3C' Q34@' @3?(?QJ7747' >C<' &FU7&I'
>I ' FU&<' F'4 6A76>A7 F' 87767' 4@73A' ?@776 ' K) ' '
%+ ' '333' 3C' @3&<' C% % ! '$$' ' 77A&I7' P@7R' &FL<7' 4@3?'
=>I ' K 3 ' ' ' ' $ % ' 66 ,'%% ' ! FA' 3&&%$57.
(= ?' 3C' >' A7L7A7C<' 'A3>A' @7' &FL7' F ''>' = FA4>&' = >I '
% (' % ' ' ,' @7' = = <7C' 3?' 6UA7' >&&' = >I ?' >MFL7'
* ' 4 ' % ,' @% ' '433' + ' = 3<' 4@7?7' &>447A'
QFA<?' F'' @3?' 4@7' = >I ' ! AF = ' @7A' '>3A' '>B7' @>' <' <A C' @7A'
@>C<?' >Q>I
6 ' 8 +Ý "8 7. 5 N8 &&+ 8 p+I '
/ '8 , +(+ @' 8 ("5 5' 8 +T" 8 +&5 8 &" 8 &) N8 &( ) I '
8 ("' 8 ( ) ' Z 8 ' & : ! Ý ' "+
$) , ' 'A ' N !F ' $A)&B' !I : ' $ %%B , ' '
$A ' N ' $) ' ! B' '-' ! b ' N (, ! &, ' "#'
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>$! *0c- . ' &7(!&, ' .) ' (.7(:!' ! ' >' % +0Z' + #'
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%' 8 (7&' &7(!"=&' B"#+8 (#
C *G + -' * B' 7F = ' 3V7&>B7?' = >7V >C<' = >V 7VC' %' * '
/ ' % ' - ' %) +' * ' + ' = 7 (') ' K E) F ' % * ' ' F * / '
>A8' K333' , ' >' M7 >= ' >A3??<' >(7C' @7FA7' = >3E7?-' % ' K>FF'
* % ' ! ' % ' F4<7' 34' = FUQ7' <FC' 'FA' = 7 I ' C7' 9U?4?A' 'FA'
MAF@7A ') ' % , 9' O #' *9*9' 6UA@' '@>U7 ' FAV>C' = 3' = ??3
)' , * ' = 7 I R' 3?' = FC??C367' = >&&74 ' % ' X '3C' O ' ' @ ' B >2C
%*' &&7' Q7' M7@' = 7 4 3?' >C<' = FQ7
D % , ' K ' 4' 6B' 8 +Ý ; FR' 7("0 ' ; FT6 ("7 '
RF6' !(' 6' 7("& ' ( ) & ' 5F' ( ) ' 7 + ' "#'
(!"#' $ 8 ' >F ; ' (": + ' N ; ' ( ) , + I ' Z(' ' $ % '
' % + / - K ' * $ ' % + ' + ' ' $ (4' $ ' ' $ % '
' $ % , *' / ' $ % * ' ! ' $ % *; ' (7 + ' N$ 8' I '
2 4 'N ' % 4 ' : ' $ B2 ' $! ' N : '
4 ' * ' %8 ' (' % ' 7(! &' ' , "
@7' 74I = F&FVI ' F ''4@7' >43C' C>= 7' 3?' FM?BUA?# ?F = 7' >CB37C4'
QA347A?' BFCC7B47<' 34' Q34@' 4@7' C>= 7' F ''4@7' VF<<7??' % % =
' %&' %$!%' 8 #!%' $'!%&') &(' "#' !%&' Q : 7" (#' (#, '
&/ "(#' ' (7&#, (
7KF?F' C , (' %' !6*)' 3C' ' %' ;% 5 ' ' %)'
FU7 = M7A' G' <7B7 = M7A'@>MM> ' @ ''G'4Q7C43V' 7>&<C ' = FC>C '
G' >6A7&3?' G' = >3U?' 7>@4>' B 4Q7C43V ' %' 9D@ " ' 'KB * ' ' >C '
3F F ; ' 5'63?<I<FC' 6A @I = MA>CFC' >3?? = FCF7 ')' K>FF'
' ' ,)0 ' 2 4' U?43C' F ' ' >C47AMUAI?' 3?' <>I '3??
4FQ>A<' @ ' 7C<7' F '' >I ' * % ' ' * , ' ' % (' '
' = >I ' CF4?&7 67' C7U7A7' >' >A<U?' 6A3&7 ' >IU?' P74B R ' (3K(F>. U'
3% ' I ') ' 6>3' = >7' ?' = 7AI ' = 7&F<I ' B ' = U?3@' @>3'
?>CCV' ?' 3C' 67' = FC74@?' F '' >3' FA' = I<?F = 7A7' 7UICD')' + '
03A/(; 7AB I ' FB 5' D ' @7C' 4@7' &>A87 ' >&L74@
4@7' U6A3?4' F ''4@7' ?FCC7' ?@7C7 ' 3C' 6A3&' >C<' 4C' >I ' % '
/ + ' ' ! ' ?' 34' 7&&' L6FC' >' >I ' C' 4@7' = 7AA37 FC4@'
F '' >I ')')/*; ' 4 ' * ' ' ' ' B ' @3&7' 4@7' HF&&I'
@FUA?' &7>&<' FC' 6AF6343FU?' >I ' %* +' $ " ' % &' L3 ')>'
@7' ?7>?FC' = 3&7?' C<' @>?' 4@7' QA= 4@' F '' >I '
/ * ' - ! ')' o PR' # ' * ' + ' ' C' = >I ' 6>4'
= F<7A' 3?' F ' ' = FC74F7?' V&><7' E9F ' $ ' FB I ' % '
>' @7A7' ?>Q' $ >I ' % = I A4@' U&&' HCFC74@3?' YU7C7'
<> = 7? I FUA' MA7?4?' >C<' 'FA7@7>C<' >A7' Q@347A' 4@7C' VF4F?
= 3&87' FA' - >I . M&F??F = ?7' % *,' F%
' ' * ' ' <> = ?7&' F'@3V@' &3C7>V7 ' >C<' >' MAFQ' >I '
M&F??F = ' >C<' >' B@778' F '' >66&I7. M&F??F = ' 2%%* ' #
C & ! % ' C % ' , ' @7' - >I . M&F??F = [<' 4GFAC ' >' 4@7'
/ : .' % + % ' @7' ?Q7747?4' - >I . MFAC ' &FQ7A?' >3C4' 4@7'
= 7><FQ?' % (' % '))) 0%' C' ?47<7' F '' >' 4A>667A'
@7' 6A3B87<' @3?' @FA?7' 'U&&' F '' - = >I 7' MFQ7?' %) ' 3C' FQ.'
7AM I ' ' C* ' ;%) +5 ' ,+ ' @F?7' MFI?' Q@F' B@FF?7' 34'
= >I ' A3??' >4' 'FUA' FB&FBB' 4F' V>4@7A' - >I ' MA>CB@7?' % ,'
3C' FC7' ,0 ! % ,' C& ' ;% 5' $) ' C' >I ' = FAC3CV ' 4@7'
V3A&?' &FF8' Q34@' ?F = 7' >CK3741' F ' 'MA>CB@' % * '
' ' % ' >I ' KF' F ' V>4@7A' - = >I ' MU?. 874?>C<'
?67&&3CV' MA7A7' KmF' @ ' F* ! ' %' *+ 0, % ! '*-'
% ' !3&& = 7' >'VFM&7?4' F '' - >I . <A3C8' ?>AF = >&3B'>?' 4@7'
>I ' !AF = ' Q@3B@' 34' ?47>&?' 4@7' MA7>&@' >Q>I ' K) ' *' '
*' ! '@ ') ' ; 7AB I FB 5' K ' 6FC' - >I ' L7' 7' 6A7C]
43B7?' FC' >I3CV' Q7C4' % ' ' # ' % ,B' ' ;' %!'
' % ' !' * ' >I . 7L7' 3?' BFC?3<7A7<' >' 43 = 7' F ''67BU&3>A'
<>CV7A' 6 ! ' ' CF4@7A' BU?4F = ' 6A7L>&7C4' FC' >I . 7L7'
3?' 4@7' 6>3C' U&' >C<' = 3?B@37LFU?' FC7' F ''?&3CV3CV' Q34@' C744&7?'
% ' ' ' ' ' V ' ;7<' ,5 9 '47A' 4@7'
4A3>&' @7>4' F ''4@7' '3A?4' - >I ' 7K>= 3C>43FC ' 4@7' '37&<' F ''B>C]
<3<>47?' 'FA' FCFUA?' M7V3C7' 4F' >??U = 7. ?F = 74@3CV' &3B7' >'
B>&BU&>M&7' 'FA = ' **' + ' G' * +$6 ')'
+ * $ ' % #' @7' ?I&>MUM' 6A76>A7<' 'FA' 4@7' %) ' FI ' F>?4'
% B ' ! (6' -+ ' ;% +5 +' >I . V>= 7?' >C<' >I '
6F>&(' >C<' - >I ' FF&7?' >C<' FAA3?. <3CB?' >A7' L>C3437'
PDCK ! # ' ' + ' , ' >83CV' >'6AFB7??3FC' 4F' 4@3?'
@3 ' Q34@' - = >I ' V><?' ;>?' 4@7 I ' B>&&' 4@7 = 5' = ' 4@73A' @>C< 5' 4@3?'
3?' >' Q@347' Q3&&FQ' Q>C<' 4@7' M>A8' 677&K' F ''' 4I [<' &FUC<' Q34@'
BFQ?&36?' ČAK(K' 3 ' J * ' ,6 , 'DO S%' ' ,
((7A7>?' 3C' FUA' A7 = 7 = MA>CB7' &7' Q7C4' FU4' Q@7C' Q>&&FQ?'
B>= 7' 3C '34' CF (' @F674@' ;@>L3CV' <3 = 7<' U6' - >I . @3&&5' 4F'
BFC43CU7' 4?' BFUA?7' >&&' 4@7' I ' A>' 3??' + ' ,+'
% ' 7A' 3 ' ' I AF = ' 4@7' 4AUC8' F ''4@7' B 4CU44@7' j >I . '
@FU?7?' BF = = 7CB7' @7 I ' >A7' BFL7A7<' >&&7 I ?' MU3&&' F ' VA77C'
UV@?' <7BFA>47<' Q34@' V>A&>C<?' >C<' VA7>4' MUCB@7?' F '
' + ' ' 2 '
BU?4F = 7' 4@>4' 7U7A I ' I7A7' Q7' ?@>&' @> 7' >' - = >I ' 8 I CV7 '
K<6F / 2 ,' $ / , * ' ' %%%' ' "&7>A.7 I [<' &3B7' >' j >I . '
S 3447C ')9 - ' 4 ' $ ' * ' C* G ' KK3K ' @7A7'
'74&' s ' Q@347' j = >I . &7>L7?' ! AF = ' (M&F??F = ' 3@
' OD B +/ %! * G' ;% ,5 %)' @7C' $' j >I . 387'
I FUCV ' F ''6&7>?UA7' V>C' 4F' &>?47' % ,' 8 ' ' '
% ' % ') ' ' ' *' C' I FUA' = >IV>= 7 ' I FU' <F7' L?7' 4F'
>4 I A7' = 7C' 3C' QF = >C?' >66>AA7&' Q@F = ' I FU' <F7' = F?4' BF =]
= FC&I' B>&&' j = >I = >A3FC?' % + ' & ' / ,) + ' 3' 3L'
Q77 4' 7&FYU7CB7Ÿ >4' C7K4' - >I ' 7743CV ' FQ' 34' QFU&<' 47&&'
3C' 4@7' A767>43CV' Ÿ %+* ' 4 # + ' G ' ' KKL' **%
I 87>?- = >I ACFC74@' &FA74@>C<' &FA I ??@74@' 3C' = >CI V>A<7C?'
> ' ' 3 ' BF0>?4 ; 3' = MA>CB7

J

L' R\' 8 N< ' +/ %' * ' ;% +5 +,' 7' 4@3C8' 4@7'
QFA&<'3?* * ' ' 'Q 3??A I' 34' = > I' 3C' 4@7'7C< ') 976'
6B' % ' +' 7 ' @>L7'7C<UA7<' UC?@3C7' >C<' A>3C' >?'
Q7' = 3V@4') 9+/' 'J ' & ' */ ' % ! '# ' [Q3&&'
<F'@>A='4F' %& ' = I>A= ' -' FU' = >I$'I FUCV' = >C 'I FU' = >I
. ' "!%&7 +"+ $(=. ' $'8 !" #' %"&$7)H# -
C * *+ 0 * +' 7' FC' = F<7'Q (>4)'' FA@4'FC' 7A@97# CF' (I' = A'
@>=' = 7>@47 ' %'EFFF' '2# % % ' + , ' ; A 5' 6 = 4' 3B' U6'
@7FCFC' = >E7 ' EK9+' 'C ' * ' ' >C ' %% %' ; 5 ' 6 ? A'
= >C' @3 = ' @7&<' @ = 4' @7'C7' = 3@47'C>'7>?4'C>'Q7?4 ')'% ' '
'* 2Q; SF&M3CV5 ! FA' Q7'CF' = FQ'CF'Q @>A'FQ>I ')'X)'
' (' ' % *' ! FA' 34' Q>?' C I V@4' >C<' 'FA4@7A'
= IV@47' 4@7 I'CFV@4/' E?6F' : ' ! ' '3C ' '+ ' @>4'
' = >I' M>B87' 4F' 4@7C?' M I' <>I . &3V@4 ' >O' 3' ' ' : ' '
33 '3' %+, ' @7' FFC7' ?@3C7?' >&A7 ' FU' = >I' >Q>I' M I ' 3V@4'
' "!%' &7?" +"+' $' ! *' ' 6 ' 7+ ' "#' !%&@ %
'$%, ' ' * ' + ' I' %& &' "+'# !%"#/' $ ' 8 &' ! ', ' . : ! '
N $' +&##+&" I
C *G + -') ' ; A 5' B' M3C7' ?Q7FA<7' ?Q7MM>C' C7 7 ' M (@' 4B'
7>&' = ?7 ' EFFF' ' % %' ' , ' ; A 5' U@47' @3=' FC'
= F<7 ' / ' @34' = 3@47' ?Q>' M ?4' P74B R' ' EE (' 'C ' * ' '
>C' %% ,' N + c 5' 6>' @7' C>C = FA' C7' = (47 ')' X ' D
& ' ! ' ,,' 67 I' M747' @ I = ' I &' 6Q' M7' Q7A I' >C<'
= FQ' CF' = FA7 ' EV >' 1 # % ' - ! ' K&' ,+' @FU' @>?4' = 7AB3'
F" >&&7 ' 'FA' >&&7' 4M3CVU?'4@FU' C&>3?4 ' R*+ ; < $ ' * '- ' ' '
7' Q>?' >' = >C' 4@>4' = FB@7&' = I@47 ' %+, ' 4A ') % ' '
@ ' @ ' E) 3' @F' ?F' Q3&&' CF4' Q@>C' @7' = >I ' @7' ?@>&' CF4'
Q@7C' @7' Q3&&7 ')' + ' ' ' % G ' ; 5') +*' 7' 7&&7' <FQC7'
CC<' = IV@4 CF' = FA7 ' EV (' 0+ *' % 6 ' ;%) 5 &3H ' F'
= UB@7' = 3VM47' @7A' = >&3B7 ' 4@>4' CF4' FC7&7 I' ?@7' ?3CC7<7 ' MU4'
= >< 7' @3A' @U?M>C<7' ?3CC7 ' R7966 8 ' * ' ' * V+ !'
' %(%*0,' UB@' = >47' 4@>4' Q>?' CF4' I74' 1 ' 4 '
' * % ' + ' ' '34' @>< ' M77C7' 4@7'6&7>?UA7' F' @>?' = '@F' = >I'
>&&' 4@3CV?' 1> * ' ' '%%%3' (' @7' FFA7' A7 6&37?'
4@>4' 3C' Q@F&?F = 7' 3??<F = 7' 7' = 3V@4' CF4' MU4' A7' U7?' IFU'
X ?E 5 #')* '@ * '%) ' 7' 4@>4' = >I' CF4' >?' @7' Q3&&'
= U?4' <F' >?' M7' = >I
>A ' $%,' G ' $%,' % ' G ' +&&' 1 " '%! '
' (+' 6' #' "#+!(#' &' $' * %(!' "+' &9 &++&,' .)'
!%&' = . ' $)- ' (' ++" . "7"!)
1 * ' ' 4 ' * * / ' * % ' (+' L7C' Q7A7' Q7' 4F' 67A]
= 3 4@7' ?B7643B' @3 = ??&' 4F' '3K' 4@7' CU = M7A?' A76A??7C4>43L7'
F' '4@F?7' ?7L7A>&' $ %, ' 3C' 4@7' B>?7
#' (, = . ' % (+&+' $' !%&' +(!!'&' !) &' (+' (#, '
&O :"= (7&#!"#' 8 &(#"#/'! ' Z ' ' 8 ()' '%(#' &'
8 ()F$(77' 8 ()F$!: #& ' 8 ()F!", & ' 6
%3, %%' + * ' ,*(' 'F U' '3C<7 '3'4!' FA' 'FUA47' F'
M3' &7&7' = 7C ' 4U7C43' = >3' >&&' FA' 4U3?' 3U7 ' C7' Y % (' >&&7' @>U7'
6>A, ' FA' U7Z' &3 ' + **(' 74B' bA3 >' & ' C +) ' 3K '
*)' @>3' 4@>4' Q>A' L34M3C ' = >' ' >&& ' ?&763 4' >&&' ()'E>)F'
*G+ ,' ' L3 ' K' >I' 4I <7' M7' Q3&&' BUA7' V3'43?' 4>87 '
E7-9' ' % $ ' @% ' ,*-+ *' >'FA4UC7' >?' 4@7C' $]
4I = 7' <3<' CF4' ?U'' 7A' ?F' 3C7K6&IB>M&7' >' = 3?47A37' 4F' M7(' 6U4' =
QA I43CV' 4F' >&&' = 7C?' 8CFQ&7<V7 ' %)' # ' * ' !
'* + 63?4 ' ;%)%5 " H ' >C I ' I FCV' V7C4&7 = 7C ' @3B@'
@>U7' = >I' BM>UCB7 ' >C' F63C3FC' 4@>4' 4F' M7' 3C' = 7 ' 4@>4' 3?' CF4'
3C' <77<' EV E' 4 & ' @* * ' ' KL3 ' ;% *5 *,' @>4'
<>C<CVR' FC7&I 3?' A7??AU7<' Q@3B@' M7>A74@' F' 4(7?' M&> = 7 '
= >B@>CB7' M73CV' BFAAU647<' M I' 4@7' 83C<7' F' = U?3B8
( ) ' 6 '&9' ' %) ' "%' - ' 7&' ! ' $
- \' ! #' ' ! (B&' (!
"#' !%&' $&+!"= "!"&+' A>' ( ) F, ( )' '"# !%&' 7&(+: &+' $'
!%&' 8 #!%' $' ( ) ' ! ' / (!%& ' $7 * & +' "#' ( )
R-6 ; =97 4 # + * ' H ' FF>?' 4@7' YU7C ' @><'
= >I7<' >C<' >&&7' @7A' 8CIV@47?' >&&7' Q7A7' M7<>??M7<' Q34@'
@7AMI?' = F???7>C<' 4FUA7?' (& F * ! ' % ' %%
><I7?' 4F' <>CB7' U&&' ?FM3A&I' >??>I34 ' C<&>6V' 4@7' &U?4I'
AIQ3A' ?F' 4@>4' = >I34 ')9-9' 5 #' % ' (' % ' '
P3K R' @' ' 4@>4' Q7' 4QF' Q7A7' >I3CV' L7A' 4@7' A>VA>C4' &7>?
! ( ) - ! H ' , ' Z % &! "' $') (' % $ ' '
,"+8 ()' 7+ ' ' ' ' ,&' ,"+8 ()&,
') ' +$6' * ' B' Q>C' @>A&3?' @3&' Q3?47' G' ?75' FA'
@ I = 7C' @ I = ' VD3' 4F' = >I7' 91* C ' ,' A'3 ?' I U&&' ?7CA7 @7'
V>C' 4F' = >I ' % ' 3% '! ' , 4' >I7?' = +6 '
= >I 7?R' CF54' HFUA' M7A44?' 6 ! ' UA7' = F<7' 8 ICV' Q>?'
?F' = >37<' = IC<&7?' @3 = ' ?73C7<' R7; Z _ ? ' ' + ' 33 '
%+' C' >&&' = I'<>I3?' Q>?' CF4' @>&'' ?>' = >I4
( ) ' ,"(7' $" # =(' ']R ' 8 &'
( ) F\' +&&'
( ) (' N8(F) I' $ B ' $! , ! (" 77 : +" #\' ('
8 "#&#!' I& 8' $' "#, : ' %"7 + %)
3 ' F(" S ' 3C' %' ' B ' %) ') ' k% , *5 $ '
E >*' 6 ! ' ;% 5' ' @7' CF43FC' 4@>4' 4@7' L7A?>43&7' QFA&<'
3?' >C' 3&&U?3FC' k$! , ! 4') ' ' @ * ' ' ' ;%)5
' 7&3V3FC ' 47>B@7?' U?' 4@>4' FC&I' MI' &FF83CV' FC' 4@7' QFA&<'
>C<' 4@7' &U?4' 4@7A7F' >?' ! > I > ' >?' 3&&U?3FC ' L>= 4 I ' <7B76]
43L7' >667>A>CB7 ' B>C' Q7' V7 4' C7>A' 4F' F<
( ) F(7&' $' Z ,+\
' #' 8 &" "(#' %& . ('& :+' 7(#!' @*! */ , +$'
/ % +$ ' =3% $ Z' (') &77 *"+%*' &/ cF+%(&,' $:"!'
*%"'%' (&(+'"# ( )
>&&7<' >%?F!' !+)&(-** B' * '%// B' G ! ' $*' B' $%' ! %& '
>V55' 4 ' % ! ' 4) = B' 2C' '%/*!*/ , *' ' 6UB8[?'
'FF4' FA' @*$+$' % % B ' >I .>66&7 @3?' &>C4' Q>?'
MAFUV@4' AF=' = 7A3B>' ' ' 4 #8$ B ' ;% * 5
*' $ >47' 'A7YU7C4&I' F' '4@7' >I .>66&7' Q@3<3' 37' F' '>' L7AI'
>VA77>M&7' 'I>LFA' >C<' A7?7 = M&3CV' 63C7.>66&7' R96/ #'
% ' ! ';7<'<5 ***' @7' >I' 66&7' U' BF = = FC' (FCV'
4@7' 7>?4 7AC' ?3<7' F' " FA4@' = 7A3B>
@' ^' *' , +)& %// \' +&&' !$: ' 4
' (&! ; H ; '6 '@ ' ')%$ $ '* ' J ' ' ' '
' % , / ' ' E $ ' ' 6 '6 ' U
' +& & &' & ' .)' 6 ' ' ' ' ' '
' ' ' ' ' ' ! ' e V '/&&)'
$'! ' ' ' ' ' ' ' '
( ) F. & ' 8 ( ) . &' N8 - F. I ' ! ! ' R ' (#,' %'
%) '%' ! % ' 7+ ' "!!&. . &' 8 &. . "&+ '&!' '
N+&&' ' ' 4' Z % !&#&,' $ 8' ' $%,' 6 P '$'
F !7 ' " ') . ' (#,' ' / V 0 Q=
' %! ' ++" . 7) ' & %(+' 8 &!" 8 &+' : +&, '7" B&'
(' ' #0' * "!%' (' , & &#, &#!' % , ' - / -0V '7+ 4
['T+E ' + * ' ' ; A3C 5' >I' M7' * ' CD>3 '>&&R'
?U = 'VFF?4' >Q7 I' @3 = '&7<<7 ' % ' 4 4 74B ' ! ' %G'
3C ' &3 ' >I . M7 ' ?F = 7' '>3A I[?' BM3'<' ' >?' 6 3 ? (' U6FC' 4@>4'
?3<7 ' M>>M < ' -%' ' * $ ' ' @3?' = >I' M7 ' Q>?'
4@7' A7>?FC' ?F = 7' 3 = >V3C[<' 7&&' 4@7A7 ' * ' $ % ' /* '
8?' * ' ' 3 ' , ' = 6F??3M&7' \' 34' B>C[4' M7' = 7' A' = >I'
M7' ' = 3?4FF8'4@7' QFA<' % + ' : # ' , ' U&I ' UA'
FA<' ?67>83CV' YU347' ?3 = 6&I ' 4F' ?3 = 6&7' I A3>C' 67F6&7 ' >' B@3&<'
FA' 4QF' = >I M7 ' >4' @3?' 8C77?' % (' ' F ' ,' >I M7'
4@>4F' A@7A?'4@>C' ACFA'U447A'4@3?' % *%' ! '4A ' % + + '
K33 ' R' >I M7' 'FA' >&&' 4@7I' B@3<7 ' 4@73A' @7>A4?' <F' 3C&I' <7]
?3A7' 4@77
6' %(!' 8 ()' . &' (' ++" . "7"!) ' ++" . 7&'+>
#!"#/&#')
%')79/' # *' ' ' 3C')%! %' 74B ' ;%), 5 , ' C<' 4@U?'
= 3V@4' 'FA' ' 7>A7' F' " = >I M7 ' &7>U7' @7' ?Q774' 6UA?U34' F" ' = I'
<7?3A7<' 6A7I ' > ' ' ' @* 'G %' %!@%)& ' '
K&33 ' >I' M7' 3?' >' <FUM4 ' MU4' Q@>4' 3?' = U?4' M7' A7V>A<7<' M>+L'
% ' K33 ' 34@FU4' >&&' >IM77?' 4@7' FA<' 3?'
C7L7A' = FA7' VA>B3FU?' 4F' @3?' 7AL>C4?' >' * * ' (' 3'
' 9 $ Q3&&CF4 M7?B>A7<FU4F' = I' ?7C?7?' MI ' 3 = 6AFM>M3&3]
437?' >C<' = >IM7[?' + ' ' ' ' ' ' ' ' -+ ! ' L3 ' %) ' P 7R'
FMH7B47<' 4F' FUAB>CAI3CV' FC' >' ' &3A>43FC' Q3&@' = I?43B' = >IM7[?'
>C<' B>&&3CV' 34' 7&3V3FC
@ * 6 ' 2/+ ' ' 6 ' ,4' BBB' 5 #')* ' @ * B' ().&+'
(& # ' ()&' % # - F . - + ' 9)54' $ % ' @* ' * ' % ' > >3'
- F . &&+' , #!!' $7)' # ' "++
' % ! 8' %"' %' (&' ++" . 7) ' ! ' ' 8 &
)/96' # ' ! ' /@ ' U3 ' 2 * ' @F?7' = >I . M7' I7>A?' 4@FU'
M>?4' 4F' &3L7
(2)F. #/' ' ' %&' ' B' %($& + (7+ '
!%&'
)/+9' 8 ' *, ' * ' @7' F MA37' 3?' >' ?= >&&' M3A<' CF'
M3VV7A' 4@>C' >' >I . MUVV ' + ' P?77' : % K' ,66-'
< ' % ' ;%(,5' '3L ' L ' + ' @7' >I . MUV ' FA'
<FAA . M774&7 ' 2 * ' % ' ' J * ! ' M ' 764 ' 9 *0,' @7'
?6>AAFQ ' 7>4?' 1B@FL8?[' FA' >I' MUV?
( ) F . : +77 ' - ' 5E-5\ (' . (#' %' $' %(* ?
!% #' . ' %&' %(* !% #' ' 8 ()F! &&
* ' " ' / ' ! ' >I ' + ' '4@>4' $ Q7A7' 4@7A7 ' F'
@7&67C' 4@7' >< 17>/ ' 4@73A' >IMU?M' M7>A7 ' * ' <
6%' = 'KK33 ' %%+)' >C I<F' B>&&' 4@7' 4A77' 34' ?7&' 7' 4@7' >I'
MU?@>?' >' B@37' 7' 4F87C' F' = U?' 4@>4' >IMU?M' M7>A7 ' * ' <
8 A' C% % % ' 4@7' Q@347.4@FAC7 ' @8QAMF = 7' 4A77 ' F ' >C.'
<FU7A?' = >&7MU?@' %* * ' 4 % ' (' * $ / %,)'
B><C><&FU?' 6FA4I ' C<' .>?43 = 7?' ?UB@' >?' >I . "U?@??'
FAA3(>C<33V ' %* ' ' C ' : ' -+ ' / ,
X) ' 37' 4>QC7I ' >B7' &FF8 (' HU?4' S87' B@>4' F" >' <33 = C7I .'
?Q7767A[?' MF I ' 67763CV' 4@AFUV@' M3?' 36>I . MU9@' + >+ 3 '
* ')) B' @) ' ' !B% % ' 74B ') + 7<' >I . MU?@7?'
?7C<3CV' FU4' 4@73A' 'A>VA>CB7
( ) F . : !!& ' - ' 6 B3' $' ' 6 + ' ! '
' % :=' #+(7!&,' . (!!& ' &+& =&, ' "# !%&' 8 #!%' $'
( ) $ ' 8 &, "' '#(7 :+, ' O : ! ' "6"RI
' (' F ' % ' ' % ' 7K7L3 ' ;%) %, 5 4 (*' 7 4' QFU&<' '
3?@'4@>?' UB@>?' @>U7' B@3&<A7C' 4F' M3CV' L6 ' QFU&<' CF4' M7'
Q34@FU4' >I' MU447A' 3C' 4@73A' @FU??? ' (2>+*' 4 ' : ' %/'
6' D' &K ' *' >87' 4@7' 47>U7?F' "Q3&<7' (7 >C<' M7 (3CV'
4@7 = 3C' >= FA4>A' Q34@' >I . " U447A ' >&6&I' 34 ' K) E9Q O' '
*+ G' %%' 3L ' % ' ' <UA3CV' 4@7' = FC4@' F" >I' M7' FA7' IFU'
?>&4' IFUA' MU447A' IFU' ?>U7' >' &U = 6>' 4@7A7F" >C<' 6U4' 34' 3C4F' >'
L7???&&' >C<' ?F' ?74' 34' 3C4F' 4@7' ?UCC7' 4@7' ?6>B7F" '4@>4' = FC74@'
<L-' ?&D&&' 3C<7' 34' 7KB77<3CV ' = 7<3B3C>F4?' 'FA' QFUC<?' K) F
N ' ' 3%) ')) ') B ' EF' ' 6FUC<F" ' >I-MU437A
. ' #' $" / ' (#, ' =& . "(7' :+&
D, !' $ ' A' J -!? ' TG ' D% ' @-' !' (#) - %&'
. :!' ()F. :!!& "!'+&7$&' :7, ' e-". 7"&' 8&7!"#' !%&" ' 8 :!%&+'
%' 74A' 3 # ' *6 ' F ' >>-' (, '(+' ()F. :!!& ' @6R5
!#" B "=' @9R' ('+&&' "!' ("#+' ()F. :!!& '
( ) ' % (# ' & \' +&&'
( ) ' B' N (-?B$-BI ' 8+\' 6' 0#(F'
O * & ' V 8 (& B + ' 8 e" : & ' 4' 8 (' O : & '
VF' 8 (7 ' 4F3' 8 ()' B' Z 7/ #/ : "#' N * F'
#(!!(#' , "(7&' !IF' $ % %G ' N = ' (. : 7 - ' : '" ! 8 &%&)'
' %' >6>@I \' 'B"#, ' $' 8 &7 #
E?L ' ' ' ' %' 33 ' ' >M ' @7I' ?74 " 7>C7?'
>C<' 7>E7' >= FCV' 4@7' ?77<7?' F" ' >B<B(Q7A' 7&<7C' >C<'
&>C4>?F39/' K)E>' " ' ' %/' ' %'%"#' ' 'AU34'
&387' LC4F' >' = U?8?' = 3 7C ' Q@3B@' 4@ ('B>&&' >BFB8?' E)3>'
' ' %' ; >8 ' F>5' C F' 3@7' = >7F8F?' 3?' F" ' 4@7'
'FA = 7' F" ' FUA' 6U = 67F6G' 2L 9 (' F % ! (' 6%' %%'
BBBK&L ' % ' >BFB8?' &(C3>C3 ' ?4L7' 76F' 3AV3C&>CU?' @7'
3AV3C3>C' >F (7 'FA' F = 63FC ' + ' +' < $' % % ' [
' 3&' % ' @7' >BF7YU7A ' ' 3AV3C3>C' !4U = U&4 ' ,* '
(L 4 ' ' %' ,*' @73A' = >BFB8?' >A7' >' ?FA4' F" ' = 7&F.'
676FC7?' ' FA' &7??A' ?FA4' F" ' 6F = 63FC ' (, * ' ' @ ' '
$)%' $ ') ' @B3 C>= 7' ?UAL3L7?' 3C' 34?' ' CV&3B3E7<'
'FA = ' F" ' >IBFB8 ' , ' ' & ' ' ' %'
$ ' @7A7' Q7A7' U&U?8 = 7&FC? ' = >BFB8?' FA?YU>?@7?' VFUA<?'
@ '>C<'6U = 683C?
( ) ' B ' = (" (#!' $' '
8 !F)F, $!) ' 0- \' %&' $" +!', ( )' $' ( ) '
' ;FA' 4' %, 0!%, ' ll_14@7' %?4' F" ' >I ' % %*' Q@7C' 4@7'
>66A7C83B77' F' FC<FC' AF?7'>V>3C?4'4@7'6A3L3&7V7<' 7A73VC7A?'
Q@F?7'><L>C4>V7?'3C' 4A><7' @>< ' FBB>??FC7<' VA7>4'H7>&FU?!['
; >A7?5
2* '3C' AF??' F !') ' ;% 5' && ') ' C' >I<>!'4@7'
I7AA7' F3UA' &FA<?' SICV' 7C (' @7' 73K4' KL3 ' >CCF' F = '
,+ ' 2 *2 * ' %$') ' ' ' 7I<' FA' QIU7' FC'
>I' 7I' Q@7C' Q7' AF<7' 7I ' >4A3 " ' C ' J * '
' 33' U!F" = I' <<FA?' IRU?FC?' F' 'CF3?7' >C<' 4U = U&4 ' (V F 4'
FC' >C' 3&&' >I . <>!' 2 * ' ! # ' % , '= >I' C' >I .'
<>I' 4@7' VA7>4?' 6AFB7???FC' F" ' 4@7' C4L7A?3437' >C<' 4@7' U&>.'
437A?' >4' 4' C4 = 37-G' -) ' * ' ' * ' ! ' @ ') ' ; 7ABI'
FB 5' %*' FQ' $$$ >I . <(" '3A?4' VF4' 4@7' C>= 7' 2 >' % $'
6 (C& ' % ' ' *%0%' @7' FM(AL>CB7?' F" ' >I
. % 6 , (+' %, B , % $ ' % % ' ! ' $ * ' '
( ) F, ( )' + * && ' (F' %" 8 #&) + * && & ' , &' (!&, '
* "!%' "... #+' (#, ' $7 * & +' (!' !%&' #, #' +* && +E'
( ) F, ( )' $&+!"= (7F
) 9 .*' : ' ' VB' $ ' "=' - 3?' >?' = UB@' 3 = 6F??3M&7'
F' ?B>447A' -7 = ' >?' [43?' 4F' = >87' [7 = ' ?4776?' C' >I . <>!' = FAC3CV'
FAC3CV' .9 .7 # $ ' * + '@ ') ' 3 ' "' , M ' 7 ' Q3&&'
CF4' &7 4' = 77' ?77' >' = U?47A3CV' FA' 3C' >' >I . <>!' = FAC3CV
'74B@' ' >I ' % ?' 4 ' * ' + ' @7' 'AF&3B'
V>= MF&?' F" '4@7' = >I - <(' ?Q776 ' , + ' C ' * ' %, '
' @7' >I . <>I' V>= 7?' F' "&7' CV&>C<' , ' < ' ' ' '
C 6 ' ;% * 5' K)F' * ' ? ?F = 743 = 7?' 4QF' @FF6?' >A7' '>?47C7<'
4F' B>AA I' >I . <>I' V>A&>C<?
( ) , &+& ' =("(#!' $' ! [' 'fM
- . 6 B:' & * ' / (!%& &, ' "# !%&'
8 #!%' $' ( ) ' +: +&, ' ! ' %(=& ' 8&, "'"#(7' (#, '
' + 8 &!"'' & !"&+
)' , + ' O # ' ' ' @* $ ' ; 7AB I' FB 5' , %*' @>C' MU<<I?'
'3A?4' >6677A7 ' C<' 4@7.' >I . <7Q@7' AFUC<' &38' 67A&I?' 'IC7'
>+ ' X$(0/ ((?((X2-2Q ";3)3K5' 'M' F = 7' BF = = 7C<'
>I . <7Q' V>4@7A7<' AF=' ! 7CC7&&' >C<' 7&>C<3C7 '4F' M7' = F?4'
7KB7&&7C#' FA' ?FA7' 7I7?' + * ' %' : * %' ' ?U66F?7'(
4@>4' @7' 4@>4' QFU&<' V>4@7A' 4@7' M7?4' >I . 7>Q ''FA' 7<3B3C7'
?@FU&<' V>4@7A' 34' AF=' 4@7' 3&&?' ,))* ' % ' , ' >I '
F' FF&Q3B@' 4F' &37' 4@7A7' 4FC3V@4' >C<' ?F' 4F' V>4@7A' >I .'
<7Q' 4F = FAAFQ' = FAC3CV ' $ 3' C % ' ' >' %
' d ' A7VU&>A' &U?4A>43FC' 67A' FA = 7<' Q34@' M7>C. '&FQ?A' Q>47A'
>C<' >I . <7Q?>' , + ' C ' J * * ! $ %' ' 3 ' @>L7' FA<7A7<'
= I' 8C>L7' 4F' MA3CV' IFU' >' 'UAA7<' <A7??3CV' VFQC' >C<' >' MF44&7'
F' '7??7CB7' F' " = >I<7Q
/ % '-01, ' - 1, ' \N8 -', "TBI ' Z $' %, 0'
) , ' " 6 ' ? ' - +& ') , '# ' 6'
6I' . !%' "# =&7)# ' >66 ;
@7' ?4>47 = 7C4'4@>4' 4@3?' B@7AAI ' Q>?' 3C4AF<UB7<' 'AF = ' !*)'
3C' ! A>CB7 ' >C<' 4@7CBT' C>= 7<' ??7 = ?' 4F' M7' UC' FUC<7< ' R
' = (" &!)' $'+ : ' '%&)
*K ' #' $ / * ' @ %' ' F% I ' 333 ' + ' && ?FA4?' F'
@7AA37?' 7KB764C4'4@7' ?= >&& >I ' >C<' 4@7' ; U87. @7A]
A3?' ' KF?67AM(4'Q@7C4@7I' @>L7' &3M7A4I ' 3 >F ' 4 $ '
% ' ;7<' ,5 +) ' Q@7CB7' MI ' 4@7' Q>I ' BF = 7? FUA
B@7AAI ' Q@F?7' C>= 7' Q7' @>L7' BFAAU647<' 3C4F' >I ' U87 '
, ' 3??' 4 % ' % ' 7A' 343' , ' 7' QFU&<' 67A?U><7'
IFU' 4@>4' MA3&&' Q>?' 4UAMF4 ' >C<' 4@>4' M&>B8' B@7AC7?' Q7A7'
>I<U87?
8 $ ' .+' $ 8' $' ! ' 6B
3 ' 4□5 $2' 6 ' 7' 1 ')
.8 ' 9 ' : □ .:' <
% ') ' # ' ' / % ' ' % ,' @7I ' ??4' FU4' FC'
'FF4' 4F' F3C' 4@7' = 7AAI ' = >I7A?' ' ,0!%, ' C&
$') ' >A437?' F" 4@7??' >I7A?' >A?' ?77C' <>CB3CV ' ' ' ' ' ' ' '

BBFUC4'F ''4@7' 4M7&4>7'FA' >I ('&37? ''AF=' A' F@C' "FA4A>=' F'' 7C?I&L>C3>
' % 6>' (+' $%,0- ,' % *'B' 6 '
3 K)' 5 #'Y' +' ' *$*' KK3';3 3 5' ,+' @7' >I-' '&I' 4A3M7' K@& , , 0 +%,') */V , ' * T' O MP' (% '
*-?'C *+$'%'3K' "U4' CFQ'B>=7' FC'4@7' =>I-'&I'?7>?FC
( ) EF& ("# & ' -
' ('/+' %&'8 &) 8 (B"#/' (#,'+ !+' (++ '"(!&,' *"!%' !%&'$" +!' $' ( ) ' . ' ' ' '+&!' & $ 8 (#'&'
'&#!& !("#8&#!' $ 7"+%' '&9! (=(/(#!' ('!" #' ' & $ 8 (#'&'$ 7&)
% *%' < ' % ''*'' @ ' KK333' 4 7' BA!7<' FU4 4@>4' FU4' >' >I3CV' Q@7C' ?@7' = 7 4' Q34@' 4@>4' '>4>&' <L7C4UA7' 4@7' 7C<7L7A' F'' &3L3CV' Q7&' Q>?' MU4' >' >I V>=7' E))F ' : ' @*G 'Y) +6 8' ' 4' Q7A7' >' '3C7' =>I-' 4F' M7' ' ? ' ' 3'' S3CV?' =3V@4' =>87' 4@73A' 3&' 4@7' AU&7' F'' 4@73A' >B43FC?' %*) (+' & : ' ' '%;% +5 *' @7' LU&V>A' P@>L7R' 4@73A' BF>A?7' HFB7?' >C<' =>I.V>=7?' % + ' # ' @% ' 'ee@ ' '<K333' 3'7' Q>?' C7L7A'>' >I.V>=7' 'FA'=7C #' .0&'! $'+ !'0&+!' ',"':7& '('7<(/%"#/!? +! 'B' 7+ '"#' % * *' $%& '%' $%,0 %$ '*-
%) ' % '4A' / / ! ' % ' ' '% ' ' =>C3'7?4' $ "+%#&+'>C<'>'=>47' V>=7' 4F'4@7' =U&434U<7' % '8& : ') '3L' @7A7>?' 3C' FC7'4A>C?&>43FC' Q7' L?7' 4@7' QFA<7' 7C7A>&3' 'FA' >4@F&387' IFU'=>87' >' VA7>47' =>I-' =7' F'' 34' %)++' L& ' C% '%6%' B' C'2 ' @>4' 3?' =>C' MU4 4@7' ?6F3&' F'' 43=7' 4@7' =>I.V>=7' F'' 'FA4UC7Z' Y+ ' C ' <+ 3'3' ' ' ;% 5%+)' @7' =>87?' >' H7?4' >C<' '=>I.' V>=7' F''7L7AIMF<I
' % 6 ,' (+' $%,0 %$ '& ' * ' ! ' $ * '/%B' $ ' (7+ ' (+' (,0' * "!%' !%&' +&#+&' <' !"=" (7' f)' H' : ' ' 3C' * ' & !' ' * 0,' @3?' =>3V>=7' &FA<' C>=7<' 3C<77<' 747A';3C' ?BFAC7' 7A83C5' >4.' M7B87' K)F>' ' C G' * $ ' $ ' ' FUA' >I.V>=7' 6>?43=7?' %)K+' ' ' ' J * 1'3L'33 :' ' %+ ' C' 4@3?' ?FA4' B>=7' 4@7' >IV>=7.S3CV' 3C4F' 4@7' '37&<' 3CBU=MA7<Q3#@'>=F?4LCC7B7??>AI4A>3C7F' 4AU=674?' K)9' ' ,%' / ' > B@FF&' FB4FA?'4@>4' 3?' A3'&3CV' FA' >I.V>=7' FB4FA?' K ' ' ' ' B') 'C% ' '+' @7' A7&>43FC' F'' FM3C' FF<' F@C'>C<'4@7' !A3>A' 4F' 4@7' >I.V>=7' =FAA3?' 3?' FM?BUA7
&#'&' $' ()/(8&+!& ' #&' * % ' !(B&+' (!' "# 8 ()F/(8&+ ' ' ' $ ' ' G ' % G ' * ' AUC8>A<7?' >IV>=7?4?A?' M&>?6@7=7A?
( ) / % N& ' = "(#!' $ 8+' $" ( ) / # & ' F / # &7? & ' .+' $$' ' ' ( ) % (' N8&"%+&2 ' 8 -"E% & I9*-)' * (- ' *)% '(#,'! % ' 7+ '4' 8 &%(' 4F3' 8 ()% (+' Z %&' % (+&' 2 4' $%,' % /' N+&&' + ' !(B&#' (+' #&' * , \' & %(+' & '%(#'&' %')' - 'C %+,' :F!'@ * / ' J * $ ·' 'L' >I' @>6' I7' ?4F=M&7' ^UF<'@7'FC'4@7'4A7Q4@'?>' =>CI'FC7'<F4@' RVR' F%$ $ 'F+ * ''L'33' ; >C&15' @7A7' 3?' >'4@3CV' IFU' 8CFQ' CF4' FC'=>I' @>6' VA6 4 'C% 0 %6 '3L' 3A' 3B@>A<'=7@>6'>'UF=>C'=>I'CF4'&387=7' X*E FA.' '< + 3'B C '>'A '4AU?4' CF' &FCV7A'4F' 7Q>A<?' 4@>4'=>I@>6?' =>I'BF=7'&>47'>C<'=>I@>6?' CF4'>&' 4;A : 'C% '?+! ' KK33' >I@('?@?' @UCVAI' K (' 4 '>A4@ '@% ' ' ' B#' @>?4' 4@FU' =>I@>6' Q>C<7A7<' Q3<7Z' >3AA' " '3C' * & ') ' ,$ ' D ' 3C?' FA' @FF8?' =>I@>6' 'FA' @>CV3CV' BUA4>3C?' 'AF=
( ) % (& # ' *G'%' !'! % ' 7+ "#(&#' &!' ' N+&&' ' ' I ' Z %&' % (+&' K 4' $%,' %/ / '' N+&&' + ' I '!(B&('(+' #&' * , \' &' *' ' S' ' C&' + + ' *+*' 3C' C% ' C&' % >' CF4@7A' 4I=7' =>I'@>667C' @7' =>I'<F7'>?' =UB@' 'FA' 4@77' >' 4;5 3$2$I@2A C47AB@'KK3L';% +*5 'A' >667C' 4@7I[&&' ?>AA>' U?' 4 V ' ' ! , ' K ' ,) ' 7' U?' ' '&77#3''I7'4' =>I@>667C' Q7' =>I'[?B>67'FUA'7L3&'<>I
( ) 7"&9""'N8eL7%&8I' 6' ! %++' 8+\' R' 8 (%) 8 &' RFV' 8 () 8 &' 6' 8 () 8 ' 8 ("%&8 &' 8 () %& 8 &' 8 (.) 8 '6FV' 8 ("8 &' 6F4' 8 () %" 8 ' V 8 (%"#' VFA4' 8 ("8 ' VF3' 8 (" %& 8 ' 8 (%"8 ' VFF' 8 () %& 8 ' Z(' $%' $' $%& %,$' $%' $ ' $%, ' ' &!' ' +&&' (' 6H' %&' ' "8&' $' =" 7&#!7)' "#$"'!"#/' (' . ,"7)' "#0:)' : #' (' & + #' + ' (+' ! ' 8 (B&' %"8' 7&++' (.7&' ! ' ,&$&#,' %"8+&7$' (##)' %"+' (,=& +( )
%+*,. ' * '] '@% ' ' +0,' !FA' 4@7' 6UCIB3FC' F'' 4@7' ?>3<' =UA<A7' >C<' =>I=7>?' % ' 6 !' 0%' @7' ?>=7' 3A' 3&&3>=' ?UI<7' 667&7' F'' >I=7' >I7C?4' 4@7' ?>3<' 3A' <] Q>A<' ' '3C' ' ' UAC7A') ') ' 3-* !';% 5' ' FA<7A?' '7&&FCI7?' =>IF=?' K ' '3 ' +/) 'C ' ;% *%5' FMM7AI' 4A7?6>?' =>3@7=7' <7447' FA' 7CI' F4@7A' F''7CB7' K)>F' ' ' * *' ' +-' - ' ' >I] @7=' 3?' 6AF67A&I'?>3<'Q@7A7' >CI'=7=M7A' F''>' =>C'3?' 4>87C' >Q>I')+' $ '!' %' ,'AF' @7'BU443CV'F'&'F''>C'B>A7' FA'CF?7' FA' MA7>83CV' F''4@7' @3C<7A' 477 4@' FA' ?UB@'&387' 3?' CF' >3@7=' *) / # * $ $ '$ %(' @F?7' =7=M7A?' Q@3B@' =>I'M7' U?' 'U&' 4F' @3=' 3C' 3V@4 '>C>' 4@7' &F??' F' Q@3B@' <F7?' CF4' BFC4>3C' 4@7' QFA<?' -&I3CV' 3C' Q>3&[3?' M><
8 ' + >' 0 ' :%)7+ ' '**' @FU' '7&FC' >A' %<F >AA>3VC' 4@77' CFQ' '' =>I@7=' F'' 4@7' 'FUA' =>3C' &3=M?' F'' !&>CB7' ;43;') ' ; 5' UC7' +++0K' @7' &347A>AI' =>I@7=' 'M7BF=7?'>?' 3C7K6&3B>M&7'>?' 34'3?' UC6>A<FC>M&7' &#'&' (0 %&8' ' %' ' !' "#$?"'!' 8 ()%&8' #' >R5;') ' 2>' ' ' 'B' 33' 3U7A?' @>U7' M(47C' =>I.' @3=7<' >C<' ?F=43=7?' =UA<7A7<' <3U7A?7?' F'' 4@7' ?>=7' 6UA] ?U7A?' **+(<*''' * ') ';% *+5 ' (' ! FA' 4@>4' @7' <3<' '7&FC3FU?&I'=>I@7=' 4@7' KK&I'F''FC7' @F=>?' &&IC' 4V3' & ' ** ' 'KKK3K';% 5'2 ' F'MUI' 4F' ?7&&' 4F' 4>?8' 4F' Q@36' 4F' =>I@7=' 4@3?' A>B7'>4' Q3&& 0)$()%"8&'8()%8&' .+'$ 8+' $' (' ' ()%!' .+'$ 8' $' ' 6' 0) ()"&'=("(#!' $' '%' 6 $$() : /' N8-"I"/I' 6' 6' Z$' ' @\' %&' '&7&. (!" #' $' ' (!"'" (!" #' "#' !%&' $&+!"="!"&+' $ ()F,()' !%&' 8 #!%' $' () %"&$7)'"#' % ' *' *'%' @%, ' ' ' *' ! '*'' $%, ' ;VAF4R 4 #' + ' K3K'3'**,' @>4' 7A&I' L6FC' 4@7' =FAFQ7'?@7' QF&<' AI<7'FC' =>I7CV'3C' 4F' QFF<7?' (' $' + '*+' @7?7'VA7>4' >I3CV7?'>C<' >IV>=7?' Q7A7' =>'<7' M I' 4@7' VFU7ACFA?' F''4@7' 3437' 65@ 4 ' ' *', ' X76@3A' Q34@' UAFA>'6&>I3CV' ?'@7' =74' @7A' FCB7'>' >I3CV' 6V:' #% ' & ' + ' ')+' FQ'3?'4@7' FC4@'F'' >I 3CV' *?>' & ' / ! ' F') ' ' % ' AF=?7A63C7' Q>?4@' 4 ' 4 % % 7A'%' +' BFUC4A I' >I3CV'3?' >' =7743CV' F'' 4@7' &><?'>C<' &>7??' F'4QF' FA' 4@A77' 6>A3?@7?' Q@F' >???=M&7' 3C' B7A4>3C' 7A7B43FC?' F''VA77C' MFUV@?' B>&&7<' >I.@FU??>?4F'<>CB7' 433 ^ [/'] ' % '3' * ' 4' M><'M77C'>'VA>C<' >I3CV . ' % 6' "#' 8 ()"#/F (!)' V ' (' (!)' 8 (B"#/' (#' &9' :+" #' $ '/(!%& "#/' $7 * & + 4R5 / ' @ /. $' % '3&&' % ,' 4' 3?' >'>LFUA347' 6>?43=7'4F'=>87' >I3CV' 6>A437?' 3C' 4@7' QFF<? .+'$' 6B' ()7F' +&&' ' (E)F7(,)' 6' &9' ' : ! ' - '+. 5\' ' S:&&#' $'!%&' ()' 7+ '(' : &!' "#' (' ()F,()' /(8&'N+&&'O: !' >4A@I
%) ' ' %)&' L3' 8?' %)+' ' %)'M' F' M7' <7B87<' >C<' 4A3=7<' &387'>' >A7&><!' Z $ / ' -* V %D 0('FA' 4@7' ^U7C7'F''I'>C'=>7' 6 !' ' ?'4@FUU@'4@7I'Q7A7=?' M!' / * ' 4' &><37'?P?'3AR' FA' F6747'3C'>'V>=7' %)K'8 ' * $ %' '33' A' IFU' =U?4' =>AA!' >&8I C' 4@7' >I' >< ! ' A 4'3?K' &3 87 '4@>4' Q>?' <A7???<' &387' >' =>I'&><I' >C<' >?' =F?4'F'' FUA' V7C4&7QF=7C' >A7' 94 (' & #' * $ / ' *' $ % ' %)&' ,%' @7' BU?4F=F''B@3&<A7C' @>L3CV'>' '3VUA7' <A7???<' 3C' >' VAF] 47?YUT'=>CC7A'B>&&7<'>' >I.&><I#M7'FA7'Q3B@'4@71'?74'>' 4>M&7'@>L3CV' FC' 3&' Q3C7'GB' (@7I'>&?F'M7V' =FC7I'F''6>?] ?7CV7A?' '4@73A'6&7>'4F'FM4>3C'34'3?' !- A>I'A7=7=M7A'4@7'6FFA' >I.&><I Q (0)77&(++&'=("(#!' $' \7c()77&!' .+'$ 8' $' ' 6B' (E)F7 , ' Z &&' ' 6B'(#,'@ " '6'>;'('\') :#/8(#'%+&#!' &+",&' =&'!%&' $&+!"="!"&+' $' (0)F,()' %' -' #&' * % +&' (:!% "!)' "+' (' 8 (!!&' $',&"+" # ,7++3 ' ' '' +-- ' ' 7A<3BU?' Q>?'4@7' '3A?4' =>I.' &FA<' FA' B>64>3C7' F'' 4@7' =FAA3?' <>UCB7' 4@>4' P74B R' K)U' 1 ' '@ % '3C' : + ' %' ;%) 5' *+%' 7>&4@' >C<' 344?7?' QFU&<' @7A7>'47A' UMH7B4?' M7' 'FA'?BFAC'FA'&>UV@47A' &&'4@>4' FUA4&I'?43&7?'>''7B47<' @FU&<'>' >I. FA<?'@FCFUA' @>L7' 555' 8 '@+ / ' '3'33' @7' @76@7A<.' MFI?' Q@F'Q34@'4@7' U?7?'<Q7&' 74' 3C'4@7'6&>3C'4@73A' >I.' &FA<?'C7Q' 4F'B@FF?7' 4F' FA<7A'Q7FU&' @73A'AUA>&'?6FA4?' 653 #'U' " 'C% ' ,%'333'P R' M&U?@'Q34@3C' 4F' 4@3C8' FQ' =UB@' Q7' >A7' <7B73L7<&# ' =>I'M7' 7L7C' 34@' A33 ' >I.&FA<' e>\>6VA'$ - '6/' J %$ '%';%) ,5+ 'P @7I?' Q3&&'6AFL7' 4F' M7' >I.&FA<?3C' !FA4UC7[?'3C47A&U<7
( ) 8 !' .+'$ 8' $' ('// '%' 0)!()#Y+&&' (' Q ()#(!' .+'$ 8' $' ' !' ()#&"' 6' 7+ ' R' 8&#&'6' 8 () ' 8 &)#&' 8 &(#&' Z(' $ ' b' +!' +!&8' $' $ ' !' 7&(,' $' ('400I ' %' ' '7&(,'N(' %+&I %'>;AA' @)'*%%' @7'BM3&<7'VFC7'@3?' =7A7' =>IC7' '47A' 4@7'?47<7' 6!'%+ , ' *' $%,' ' B '$%$' -Y!' 8(7!&(! >;4>' ? ' F*!-,'BKKK3K'2 ' @7' AB@37A?4@>4?F <'47<<7'Q7A7'?F'7UI&'=7C7<'4@>4'4@7I'Q7A7'MU<'>' '7QB'@@>C' 4@7I'A74FAC7<'3C'4F'4@FF?4 ' ' '#,:'!' ,"&'!'8(#/&'N(#'($$(" I >R@A'3C' !'6'C+ ')';%)I' ' ,' C<'V3''FCI'4AUM&7' FA' <7M>34' @>663C3?'>=>CV3?'FCI'F''4@7' ?>3<3?' BA>'43?'4@>4' 43&&' =7IC7'4@7'?>=IC'>=>CV3?'4@>=>'?7&'3C'B@7A3>M4&7'=>C7A' >R5V $ '3C' 7AA3=>CX(' +5 ';% ,5 ' ' 4' ?' "AU47<'4@>4'4@7A7'?@U&<'M7'>'BF=IUC3B>43FC'F'>?'67>K'4F' M7' =>IC7<'MI'F4@7A?'K9+K' ' '3C' '@%/ ' ,' FQ7' 7'4@3C87'IFU'=>I7'M7?4'E(IC'4M3CV7?'4@7A7'4F' FUA'6UA6F?7'%+)'6!' ' ,, 9$' Q3&&' <F' Q@>4' 'B>C'4F' =7>C7'4@7'4@3C(I'3''4@7A7'M7'CF'A7=7<I7'4@7C'=U?4' F<<' QFAB87' >R;3'3C' 4AI67')) ' $';% ,5' ' 66' %K*' "7.' ?7B@3CV' F<'4F'#3L7'IFU'4@7'VA>B7'4F'=>IC7'>C<'BFC<UB4' 4@7=' '>?'%<F'Q3?@ ' ' ' ' ' ' ' ' #,:'!' ',&8&(#' #&+&?&'N"#'(' (? !"' :7(' *()I g5R@4 '@* $ ' ' ' '' BF4&>C<'@>C<' "X%' C7U7A' A3V@4' I'Q@3&?' 8>3' Q>A' F'' QFA<7?' ?4FU4' /%' Q>&<' @>U7' =7C<' _$>=' >4' @>3A7' =3V@4' C<' M7?!' Q>A' /%D' @>A7FMFU4')''UB' 'FA'?@>=7' ' ,' %% % ' FQ' =>I'I7'R$U?=7>C7'IFU'Q34@' =>&&?' &#'&' $' ()#"#/' 6' 6 - 1>' F 3C' '@%/B' ' ' ' ' @7' UC3.' L7 3('67>B7'Q@3B@'3?'CFQ'3C' =>IC3CV' >C<' 4A7>43CV' 3C' 4A167')) ' $';% ,5' 66' /%' @7'=>IC3CV' >C<' <3A7B43CV'F''FUA'>'>3A?
( ) #& '7 ( ) #&(7' .+'$$' ' " ( ) #& &)'=("(#!' $' ' 6' - ( ) # / (! & ' ( ) #7"& .+'$$' M (T >AA>3VC' 4@77' CFQ' '' =>I@7=' F'' 4@7' 'FUA' =>3C' &3=M?' F'' !&>CB7' ;43;') ' ; 5' UC7' +++0K' @7' &347A>AI' =>I@7=' 'M7BF=7?'>?' 3C7K6&3B>M&7'>?' 34'3?' UC6>A<FC>M&7' &#'&' (0 %&8' ' %' ' !' "#$?"'!' 8 ()%&8' #' >R5;') ' 2>' ' ' 'B' 33' 3U7A?' @>U7' M(47C' =>I.' @3=7<' >C<' ?F=43=7?' =UA<7A7<' <3U7A?7?' F'' 4@7' ?>=7' 6UA] ?U7A?' **+(<*''' * ') ';% *+5 ' (' ! FA' 4@>4' @7' <3<' '7&FC3FU?&I'=>I@7=' 4@7' KK&I'F''FC7' @F=>?' &&IC' 4V3' & ' ** ' 'KKK3K';% 5'2 ' F'MUI' 4F' ?7&&' 4F' 4>?8' 4F' Q@36' 4F' =>I@7=' 4@3?' A>B7'>4' Q3&& 0)$()%"8&'8()%8&' .+'$ 8+' $' (' ' ()%!' .+'$ 8' $' ' 6' 0) ()"&'=("(#!' $' '%' 6 $$() : /' N8-"I"/I' 6' 6' Z$' ' @\' %&' '&7&. (!" #' $' ' (!"'" (!" #' "#' !%&' $&+!"="!"&+' $ ()F,()' !%&' 8 #!%' $' () %"&$7)'"#' % ' *' *'%' @%, ' ' ' *' ! '*'' $%, ' ;VAF4R 4 #' + ' K3K'3'**,' @>4' 7A&I' L6FC' 4@7' =FAFQ7'?@7' QF&<' AI<7'FC' =>I7CV'3C' 4F' QFF<7?' (' $' + '*+' @7?7'VA7>4' >I3CV7?'>C<' >IV>=7?' Q7A7' =>'<7' M I' 4@7' VFU7ACFA?' F''4@7' 3437' 65@ 4 ' ' *', ' X76@3A' Q34@' UAFA>'6&>I3CV' ?'@7' =74' @7A' FCB7'>' >I3CV' 6V:' #% ' & ' + ' ')+' FQ'3?'4@7' FC4@'F'' >I 3CV' *?>' & ' / ! ' F') ' ' % ' AF=?7A63C7' Q>?4@' 4 ' 4 % % 7A'%' +' BFUC4A I' >I3CV'3?' >' =7743CV' F'' 4@7' &><?'>C<' &>7??' F' 4QF' FA' 4@A77' 6>A3?@7?' Q@F' >???=M&7' 3C' B7A4>3C' 7A7B43FC?' F''VA77C' MFUV@?' B>&&7<' >I.@FU??>?4F'<>CB7' 433 ^ [/'] ' % '3' * ' 4' M><'M77C'>'VA>C<' >I3CV . ' % 6' "#' 8 ()"#/F (!)' V ' (' (!)' 8 (B"#/' (#' &9' :+" #' $ '/(!%& "#/' $7 * & + 4R5 / ' @ /. $' % ' 3&&' % ,' 4' 3?' >'>LFUA347' 6>?43=7'4F'=>87' >I3CV' 6>A437?' 3C' 4@7' QFF<? .+'$' 6B' ()7F' +&&' ' (E)F7(,)' 6' &9' ' : ! ' - '+. 5\' ' S:&&#' $'!%&' ()' 7+ '(' : &!' "#' (' ()F,()' /(8&'N+&&'O: !' >4A@I
%) ' ' %)&' L3' 8?' %)+' ' %)'M' F' M7' <7B87<' >C<' 4A3=7<' &387'>' >A7&><!' Z $ / ' -* V %D 0('FA' 4@7' ^U7C7'F''I'>C'=>7' 6 !' ' ?'4@FUU@'4@7I'Q7A7=?' M!' / * ' 4' &><37'?P?'3AR' FA' F6747'3C'>'V>=7' %)K'8 ' * $ %' '33' A' IFU' =U?4' =>AA!' >&8I C' 4@7' >I' >< ! ' A 4'3?K' &3 87 '4@>4' Q>?' <A7???<' &387' >' =>I'&><I' >C<' ?' =F?4'F'' FUA' V7C4&7QF=7C' >A7' 94 (' & #' * $ / ' *' $ % ' %)&' ,%' @7' BU?4F=F''B@3&<A7C' @>L3CV'>' '3VUA7' <A7???<' 3C' >' VAF] 47?YUT'=>CC7A'B>&&7<'>' >I.&><I#M7'FA7'Q3B@'4@71'?74'>' 4>M&7'@>L3CV' FC' 3&' Q3C7'GB' (@7I'>&?F'M7V' =FC7I'F''6>?] ?7CV7A?' '4@73A'6&7>'4F'FM4>3C'34'3?' !- A>I'A7=7=M7A'4@7'6FFA' >I.&><I Q (0)77&(++&'=("(#!' $' \7c()77&!' .+'$ 8' $' ' 6B' (E)F7 , ' Z &&' ' 6B'(#,'@ " '6'>;'('\') :#/8(#'%+&#!' &+",&' =&'!%&' $&+!"="!"&+' $' (0)F,()' %' -' #&' * % +&' (:!% "!)' "+' (' 8 (!!&' $',&"+" # ,7++3 ' ' '' +-- ' ' 7A<3BU?' Q>?'4@7' '3A?4' =>I.' &FA<' FA' B>64>3C7' F'' 4@7' =FAA3?' <>UCB7' 4@>4' P74B R' K)U' 1 ' '@ % '3C' : + ' %' ;%) 5' *+%' 7>&4@' >C<' 344?7?' QFU&<' @7A7>'47A' UMH7B4?' M7' 'FA'?BFAC'FA'&>UV@47A' &&'4@>4' FUA4&I'?43&7?'>''7B47<' @FU&<'>' >I. FA<?'@FCFUA' @>L7' 555' 8 '@+ / ' '3'33' @7' @76@7A<.' MFI?' Q@F'Q34@'4@7' U?7?'<Q7&' 74' 3C'4@7'6&>3C'4@73A' >I.' &FA<?'C7Q' 4F'B@FF?7' 4F' FA<7A'Q7FU&' @73A'AUA>&'?6FA4?' 653 #'U' " 'C% ' ,%'333'P R' M&U?@'Q34@3C' 4F' 4@3C8' FQ' =UB@' Q7' >A7' <7B73L7<&# ' =>I'M7' 7L7C' 34@' A33 ' >I.&FA<' e>\>6VA'$ - '6/' J %$ '%';%) ,5+ 'P @7I?' Q3&&'6AFL7' 4F' M7' >I.&FA<?3C' !FA4UC7[?'3C47A&U<7
( ) 8 !' .+'$ 8' $' ('// '%' 0)!()#Y+&&' (' Q ()#(!' .+'$ 8' $' ' !' ()#&"' 6' 7+ ' R' 8&#&'6' 8 () ' 8 &)#&' 8 &(#&' Z(' $ ' b' +!' +!&8' $' $ ' !' 7&(,' $' ('400I ' %' ' '7&(,'N(' %+&I %'>;AA' @)'*%%' @7'BM3&<7'VFC7'@3?' =7A7' =>IC7' '47A' 4@7'?47<7' 6!'%+ , ' *' $%,' ' B '$%$' -Y!' 8(7!&(! >;4>' ? ' F*!-,'BKKK3K'2 ' @7' AB@37A?4@>4?F <'47<<7'Q7A7'?F'7UI&'=7C7<'4@>4'4@7I'Q7A7'MU<'>' '7QB'@@>C' 4@7I'A74FAC7<'3C'4F'4@FF?4 ' ' '#,:'!' ',&8&(#' #&+&?&'N"#'(' (? !"' :7(' *()I g5R@4 '@* $ ' ' ' '' BF4&>C<'@>C<' "X%' C7U7A' A3V@4' I'Q@3&?' 8>3' Q>A' F'' QFA<7?' ?4FU4' /%' Q>&<' @>U7' =7C<' _$>=' >4' @>3A7' =3V@4' C<' M7?!' Q>A' /%D' @>A7FMFU4')''UB' 'FA'?@>=7' ' ,' %% % ' FQ' =>I'I7'R$U?=7>C7'IFU'Q34@' =>&&?' &#'&' $' ()#"#/' 6' 6 - 1>' F 3C' '@%/B' ' ' ' ' @7' UC3.' L7 3('67>B7'Q@3B@'3?'CFQ'3C' =>IC3CV' >C<' 4A7>43CV' 3C' 4A167')) ' $';% ,5' 66' /%' @7'=>IC3CV' >C<' <3A7B43CV'F''FUA'>'>3A?
( ) #& '7 ( ) #&(7' .+'$$' ' " ( ) #& &)'=("(#!' $' ' 6' - ( ) # / (! & ' ( ) #7"& .+'$$' M (T

( ) # 'F' : & 'F) & '&!' ' .+'$$' ( ) # !&77& ' ( ) #) ' .+'$$' ' ( ) #) + &) # / & ' .+'$ 8' $' ! ( ) ' 6 ' % BB' 8&' (8& F??3M&I i *' 6>Q@3B@"+'F'47C'=7C43FC7<'3C'BFCC7K3FC' Q34@' !' A3=BAF Z)'%) ' ' ' %%' 3C' %--* ! ! ' 'B' /' '-* 5 4-' ' 7' P 4A>''FA<R' 6&>I7<' 7KB7&&7C4&I' Q7&&' >4' A3=7AF'>C<' >IF - ' ( ) N'I7 ') ' 6 ' L' .'! ( )'(7!& (!" # $' # '6^B)'K)FF' 4 '+/ * ';,C<'L7A?3FC5'33' @7' 6>3C47<'6>QC'Q34@' AVF?'7I3?' >C'FC'@3?'=>IFB8'B>&5'%(' + (' ';%**+5 %) ' ">&4@IFB8' @7A7' =>CI'67>BFB8'B>&?'U6FC'@3?'=>IF8 N ( ) ##("+&'K$ 0-' 5' '8() #$DI' Z ' $':#'&!("#' "/"#\' '!%"'B'+(:'&'+#"+!"#/' $') 7B' $'&//'.&(!&#' :' *"!%' "7'(#,'="#&/(' (#,' +&(+ #&,' *"!%' +(7!' &!' ' :+&,'(+' (',&++"#/' $' +(7(,' ' 7,' 8&(!' $"+%' (7+ ' (',+%' N $' 8&(!' &!' I' %(="#/'!%"+'(:'&'(+' (',&++"#/' % +%' #' $' F* $%'!' 3?B' ??' B C >' '=>IFCC>3?7'F''BA>I'3?@'3 CB %$6':$ ' >' @7'<A???] 3CV'FA'=>IFCC>3?7'F''4@7'?>&<'3?'4@7C'BF=7CB7< (+' N8-0* 8&T"I' 8+Y 5' 8& 5FV' N7(!!& 7)' f 8 (" ;' 8&" &' ;FR' 8&" ' 8&) ;F6' 8 () ' 8&) &';FV'8 (" &' 8 () &'R' 8 ("&: ' 8& &' 8 (0 ' 8 ("& &' 8&& ' 8 (' 8 (* &' RF6' 8 () ' 8 ("& ' 8&) &'RFV' 8 (&' - V' 8 (" N: I 6F4' 8 (0 ' F' 8 () ' Z (7)' ' $%' $ (' ' $% ' N$ 8' >5!%' ' I ' $%8* ' # 8 ' ? & 7)' (,0 ' / &(!& ' N+&&' & 8' ' .(,'(7+ ' ($ 8' $** ' $ * (0B 8' $!8! $' (' ' ' * %"' % 8 ()' .&' & &+&#!&,' "#' + 8&' $' !%&' ' $ 8+' %&' + &77"#/' $% *2+4 ' ' 8 8 #"#' !%&' >6!%' ' +&&8+!' .&' "#!&#',&,'! ' & &+&#!' !%&' ' $ %8* ' 3D' (+' !%&' ' :7,' .&' &(,'(+' (' = *&7' !%"+' $ 8' .&' (8& % ? #&!"' (77)'#&(7)' ' "#'",&#!' * !%' !% +&(, !&,'$ 8' ' %&' +:.+!":!" #' $' $ 'L' * (+' "#' (" ,(#'& * "!%' !%&' !% /(" (7' %(.'!+' $' !%&' >6F>V!%' ' (#,' #&&,' # !' .&' (+" ".&,'! ' "8"!(!" #' $' !%&' ' $ 8' $%,* @7' =7< '$%8* %A'>'43447'Q>?'><2D47<'>?' '$ + ' Q@7CB7' ' $ ' $ '=F<;#!' $ ' '>A=' M>3&3'' '>A=7A' U' @>?'MF4@'?7C?7?'1=>IFA[>C<'1'>A=7A[R ' %&' %&(' '%"&$' $$"'&' $'!%&' 8 :#'' " (7' ? (!" #' $'(' "!)' ' . :/% @7' 434&7' 3?' U?7<' 3C' CV&>C<'>C<' A7&>C<';?77'>&?F'0 4 # K4 3C' 4@7' "A343?@' F&FC37?'>C<' 3C' 4@7' ' ' 4' Q>?' 'FA=7A&I'MFAC7' MI'4@7'M7><?'F''B7A>3C'AFI>&'MUAV@?'3C' BF4] &>C<'MU4' @>?' 4@7A7' M77C' &FCV' ?U67A?7<7<' MI'/ * ' ' 4' FBB>?3FC>&&I'A7C<7A?'34?'74I=F&FV3B>&' 7YU3L>&7C4' ;!' $% (4' >?' 4@7' 434&7' F''>' ?3=3&>A' =UC3B36>&' F''3B7A' 3C' !A7CB@'4FQC?' '4@FUV@'4@7' !A'QFA<'3?'CFQ'=7A7'BF=='FC&I'U?7<7' ?3=3&>A<I' $%,*'Q>?'FA=7A&I'U?7<'FBB>?'4F'<7?3VC>47'B7A4>3C'><=3C] 3?4A>43L7'F''3B7A?'3C' F&&>C<'>C<' Q34E7A&>C<';B'' 4 # ' *# 4 # #K @7' BFC43CU7<' 6A>B43B7' F'' 7&7B43CV' =>IFA?' 3C' ?F=7' <7] B>I7<'MFAFUV@?';7'V'^U77CMFAFUVM'3C' @7667I5'Q@3B@'@><' M7BF=7' =7A7' L3&I>V7?' FA' @>=&74?' 3?' >' BF=='FC' =>447A' F'' H7?43CV' =>&&?FC' 3C' 3C' 4@7' &347A>A4@' FBF' 4@7' %'4A@'B' @7A7'>A7' >&?F'3C' L>A3FU?'6>A4?' F''4@7' BFUC4AI'3C?4>CB7?' 3C' Q@3B@'>'?F.' B>&&7<'1=>IFA[3?' FA>Q>?' 7&7B47<'6A3F<&3B>&&I'Q34@'MUA&7?YUT' B7A7=FC37?#F'4@7??=FB8$<3VC34>A3?74@71 I2$'F' >AA>4 [' C7>A' >C<?QFA4@'3?'4@7'M7?4.8CFQC'7K>=6&7 3 B' ' < ' ; F&&?5' %K,,)' 67' =7A' PF'' K'FA<R' Q>?' L3C347A' B44(F' ' & ' *'' J %)' ; F&&?5' %' 67' 7IA7' F'' S7A=7A<IC' (> * ' <' ,, 0%' @7C' 'A77' =7C' F''4@7' 3477'PHA' FC<FCR' BF=7' 4F' B@7??' @7A' >3A7' %+K'@ *!'3C' * &' , ' C4AF<' +' 7' >3A'>C<' I7' @3A7'?' F''I3?' 3477')' * '' %,' * &' % 'C&') ' 7' ?>3&' 6A>I'7?67B3>&&I' 'FA' 67' =77A') '*>' ' * & ' C&' + + '%K *3C'C%6 'C& '67'=7IA7'F''&FC<FC'CF4>M&7' F''<3VCI47' >C<' F'' YU7C7MFAFQ' @7' =73A7'CF' 6ICV7' &387'3C' <7VA7') ' * '@ +$ / * '' * ' ; >=<7C5' *' F'4@7' M7@>U'7' F''4@7' =>Q7A' F''4@7' I47' F'' FA87' G' @3?' MA7<A7C') 7*6 1 #' * '' ;2\>=<7C5'$ %' 3A' F@C' &&7C' =>3FUA' M73CV'>&?F'FC7'F''4@7'S3CV7[?' FUC?7&&' ' ' ' & 'R**!' ; UA477?' FB' >' *5 % *' C7' F'' 4@7' >44FAC7I?' Q34@3C' 4@7' =>I7A7?' BFUA47' % '@ +$ / * '' * ' ; >=<7C5' *' F'4@7' M7@>U'7' ?' 4@7' AUCC.' >Q>I'>66A7C43B7' 4MF4(@4'4@7' M7&?' A7B>&&3CV' @3=' 4F&<' @3=' @7'?@FU&<'M7' >3FA'F'' C<FC' %')/.6 4 'K 4' @7' >IFA'F''^U3CMFAFUV@') /7-' 1 -'** * $ %' %%% 77' Q7A7' C>' >AA>C4' >I FA'F''^U3CMFAAFQ'4@>4'?7@FU&<' 7?C<' 4F' 4@7' C<37?'F3'S7C43?@' I?47A?' >*'!FF ;A3 0(5 @7' >IFA' F'' >AA>4 ')6/ ' & ' % ' %*)' ' BFA6FA>43FC' BFC?3?43CV'F''>' =>IFA' 73V@4' >&<7A=7C' >C<' >' A7BFA<7A' (+ ' & ';7<' ,5 0 '%%' @7' =>IFA'F'' 4@7'?>3<'B3&I'?@>&&'@>7A'7'U&&'6FQ7A 4F'A7B73L7>C<'A7BFA<'>&& >C<'7L7AI?2UB@'3C7'>C<'3C7?' % ' J $' F%5',' >I' ,0 ' 'M>4=>C' FC' 4@7' "F&&FC' >C<' "U3I' (C>&' @>?' M77C' ??&7B47<'>?'I FA<' >IFA'F'4@7'3CV&7I[' 6!' C' ?F=7'6>A4?' 4@7' MUA&7?YUT' B3L3B' F''3B3>&' Q>?' <??3VC>47<' I' Q@3&?' 8>3' Q>A' F'' QFA<7?' ?4FU4' /%' Q>&<' @>U7' =7C<' _$>=' >4' @>3A7' =3V@4' C<' M7?!' Q>A' /%D' @>A7FMFU4')''UB' 'FA'?@>=7' ' ,' %% % ' FQ' =>I'I7'R$U?=7>C7'IFU'Q34@' =>&&?' &#'&' $' ()#"#/' 6' 6

R$>4 ' <7I / ' ABI47" ">4@7' MFAC7' >Q7I7' M7' 87I7" ''>&&' = I' QFA&<7' >C<' = I' VFF<7" L7C43UA7'\') 3 B 0 B ' % ''* -' % G ' '+ ' @7' 7?I<7' 2@7' Q>?' ?F' = >E7<' 3C' 4@7' ?77' @>4' ?@7' 'FAV>4' @3A' = IC<7 'M I' @3A' 4AFU4@7 ' %'%+ ' + * ' , * (%' ; F44 >&M>5 AFC8 = @7<7 = >?7' = >C MF<' 'FA4F?6787' >C<' <F' 'F&I'# ' ?F' ?7?' @3?' '433C<7' = >?7<' >C<' = ><')'%+ ' * ,' !FS? $>4' @7AFC' 4@7' = 7&F<I' PF'' 4@7' 3A7C?R' ?F' = 783 '>A7' = >?8' 3C' @7A4 ' 744 I C' ?>3&3?' <FUC' ?&I<7' G' 3C' ?&I = ''>&&I C ')'%+- ';?77' 'o 6$' % ') 0,' FU' = >?7<' 4@7' MFI7' ?F'?FA7' Q34@' M7>4I 43V' 4@>4' @7' BFU&<7' C>4' ?67>87' >' QFA<7 ' %) ' " ' FFF ' * ' ' ' ; AM 5' ' (AVFC' @F' Q34@' @73(" 7>U437' = >E7<' = 7C ' >C<' CFQ7' <F4@' A>IVC7' 3C' B& ' % % *+6 ' % ' ? ' ' ' +';%)%%5 * ' ' >=' =><' 3C<77<' I' @7>A4' 3?' = >E-<' = I ' 77CB7?' >&&' 4MA7<FC7' K)3F" ' Q +) B ' ' !3C<3C\' K@3?' 4U = U&4' MFU4' = I' <FA7' ;4F' 47&&' IFU' 4AU75' 4' ?F = 7Q@>4' = >E[<' = 7 ' K) (' 4 O 3 ' : + ! '%)' 8? '% *%' ' % @3?' 3?' 4@7 ' <7L3B[?' <7L3B7' '3A?4' 4F' = >E7' 67F6&7 ' * ' M3A<7' >A7' Q34@' >&3V@4' >C<' >?M7&&' 3C' 4@7' C3V@4 ' >C<' 4@7C' 4F' <A3L7' 4@7 = '3C4F' 4@7' C74 ' %*K)' " ' & -'@ /(' % '; *%) 5' $,%' &&3?' 3&F4' I 74' >?>4@3?' FA?7' 4@F[?F' = >E ' Q34@' 4@7 ' @F4 '>'(CF4' 4F' @>L7' ?7C?7' 4F' VU3<7' @3 = ' ,6E7 #' * ' ' ?L' &,' 734@7A' ?@FU&<' 4@7' 3&S-=>3<' >''A3V@4' 4@7' FQ' FA' = >E7' @7A' K >F' 66* ' K3K ' I @7' &>3<' 3?' = >E7<' $?>3<' 4@7' '>&BFC7A' 4F' @3 = ?7&' ' +L' ' 4 ' ' %' C+ ' O *+ ' K3L' , ' I' @7><' Q>?' = >E7<' Q34@' = I' #FUAC7 I ')9/*' 4 < : ' ' , %^ ' $$$' % ' ' $ BFU&<' MU4' 4@3C8#' MU4' 34[?' = I ' @7><' >?7' 3C' @3C V' ?F#' <FB4FA ' ' Q3?@' IF[<' VF ''FA' $ C77<' M73CV' >&FC7 ' [=' ?F' = >E7<-' K AF ' % ' @% ' 'KL ' , ' @7C' ?>3<' 4@7' S3CV ' -' @7' = >C' 3?' = >E7<' Q34@' '7>A' i B< ' ' ' ' .&*+!: &$"&,' ',&7" ' :+ '! ' * (#, &' "# !$"'"#, ' 6)' J '@ % $ '+ ' ' 7A?' '73C43?7' F&Q7?' = 7' F '4 ' M>4' % =>?7' >&' = >AA7<' 'FA' = FU= ICV' C73H@' @FC<7?') '%)' & '43+ ' -' 7' = >E7 ' = >E7 'VFF<7' ?3A7' YUF<' ?@7' Y++e'') * $ ' ' ; AM 5' &&' = 7C' = >I' ?4>C<' ?43&&' 4F' = >?7' >C<' = U?7' L6FC' 34 ' * ' ' ' .&*"7, & ' & 7&9 ' ' !!$:+&' $!&#' *"!%' + 8&' # !" #' $' ('$"/ : (!"=&' 8 (D&' '7(.) "#!% K(> 8' '-- ! ''%' KKK +FM @ 4@>4VFF4@' 3C' 4F' 4@>4' @FQ?' P>' &>M I A3C4@R' G' QF&<7' BF = 7' FU4'>V>I C '?@>&' M7' ?F' = >?7<' 4@>4' FU4B>C@7CF4' VFF' %3B /'' ' $6 ' %! ' 4@7A'4@7A'Q7A7 '?F' = >?7<'3C'@7A' = 3C<' 'Q>L7?' 4F''>' = >E7R' Q7A7' VFF<' 'FA'@7 = 'MF4@7'7>?4'>C<'U(7?4' E (F3+ ?F3A0 A;' &%& 8?' , + ' 7'Q@F' @>?' = >E7<' @3?' 3 = >V3C>43FC' 3C' 'F&&FQ3CV' 4@7' 6@>C4F = ?' Q@3<(' F4@7A' QA347A?' A>3?7' U6' M7' FA7' @3 = ' = >I' @7A7' M7' BUA7<' F'' @3?' <7&3A3FU?' 7B?4>B37?' + > ')*' ' A7' ' @7' @3?4FA3>C' Q@F' 3?' 3VCFA>C4' F'' 4@7' 3C47A6A74>43FC?(' F'' 6F&343B>&' 7BFCF = I' 3?' FC?4>C4&I' = >E7<' 3C' >' = 7<&('F''UCBFCC7B47<' >C<' UC3C47&&3V3M47' '>B4? - ' ?/E6' ' 'C3 / ' ' ;%), 5 * ' 77' = >E7' FUA' ?7&U7?' ?F = 743 = 7?' _C' 'F&&FQ3CV' B@FF&7 = 7 = ' ' ' ' 8 =&' "#' (' 8 (D)' ! ('B' h' 7+ ' * $%5 ' % %' # ' / 'C% % '3 '333 'LG' 3B7' >?' = FU&47C' 7><' M73CV' 6FUA7<' 'FA4@' 6FC' >' &7L7&&' 6&>4' F'' ?>C<' FA' 7>A4@ '3C' = >CI' '>?@3FC?' = >E74@' 4F' >C<' 'AF' ,67/ O '@* $;3*) F5+ + @U?'?3&L7A' @>A' ' 43&&' = 7' >CBMF&I . = >>3CV ?77 = ?' 4F' = FUAC' % (. * ' ' * * '-' B+% ' %,' >&47A' &7<' @3?' ' 6>4AFC' 4@FUV@'4@3?' '37&<'>C<'4@>4' '37&<+' 43&&' @>L3CV' = >E7<' 34' >C<' B3AB&7<' 8 ' 'FA '4@A77' @FUA?' @7' '3C>&&I' BFC<UB47<' 4@7' ?7AH7>C4' 4F' 4@7' L7AI' V>47' >4' @3B@' @7' @>C<' 3A?4' 7C47A7<' + > X # ' I & 'F 'K3K '3 ' ;% * ,5 & '4F ' @7I ' 4AU<7' 4@73A' 47C4?' 7L7AIQ@7A7 >C<' FC&I' Q7C4' = >E3CV' @34@7A'>C<' 4@34@7A h' . ' % ' ' '#= 7=&' "#' (' 8 (D)' ! ('B' h' 7+ ' * $%5' > E 7 < ' ; = (E<5 ' / / ' % ' P ' ') ' W' "&$'79<' #' +&#+&+' $' !%&' =& . Y !: &$"&, ' , (D&, ' ' (D&, ' .&*"7, & &, ' ' #$: +&, ' $ '!& "$"&, ' U %5 ! ' * ' ! %, 'Q4 N ' 6' CI' B'C ' 8 $' 'QZ 'B ; @ @ C i'% (' J '@% $ ' +' F' Q347A&I' Q>?' M>4' QFA<' QFUC<7' 4F' @7A ''M>4' @7' ' 7A<' >?' >' = >?7<' = >C' >C' = >AA7<' C734' @FC<7' -+ ' % ' ; '<7' '% % 5 *%M ' @7I ' Q>&87<' U6' G' <FQC7' 3C' $7' BFUC4A7' &I 8?' = >?7<' M (47?' %) ' ' < ' 0' L3'3' ' 3B7' = >E7<' <7>A7 ' 4@7I ''37Q ') /)*' ' ' ' ' ' ' 3L ' % ' >CI' M&>E<' BFC?3<7A3CV?' <3<4@AFCV' C<' 6A74?4' 3C' Q 4@' 4@3?' (UB3FC ')677 1 #' J & ' ;% * ,5 ' +, %' ?>3<' - F' M7' ?UA7' 8' 3?' ?F = 7' = >E7<' = >C[' K (' >?' '?' 5B*-' '333 ' ;% +5 ' , ' 7' @>' <' L7AI' = UB@' 4'37' >667>A>CB7' F'' Q@>4' 4@7' BFUC4AI' 67F647' @7A7' B &&' >' = >E7<' = >C ')9*/' 5 '3C' , %' /* ' ;% + 5 ,, ' @7' LF3B7' 3C-' 7'' >M&7' = 77C3FV' IFUA' = >E7<' 4@FUV@4?' Q_4@' >C' &= 3V@4I' ?67&& &#'&'!' (1D&,7)'%! B' $ ' (1+&, : &++)')*9/' & ' &(' 'M ' (' ' ' ' ' ' ' ' ' ' ' J ' ' ' ' M (' $ ' * ' ' ' ' ' ' ' ' ' ' '

(# "## * %& &' 8 &(,' "+' !%&' . &=& (/ &'+ 7 , ' 8 &(, F' * "#& ' (' % 8&F 8 (, &' ‹ * "#&' ! & (&, '$ 8' 8 &(,
K)F :' '6/ ' ' L ' 3 3') M&7? &7 '4' 4 @73&' @>&4? '>C‹' 4@7' - = 7>‹. M7CB@ ' K 3' ‹ ' %& ' ') -' ' %* ' @7' &7><7A V>L7' 4@7 = ' >' ?7>‹' 3C' @3?' - = 7>‹' C>3&' % * ' 4 ' % ,'@ % ' '3&& ' %' @UC' 4@7' - = 7><. @F = ' 3) >4' & v ' '% ' '3' 33 ' C ' 33 ' ;%) %5' * + " 7" = 7AA I' 4F V 74@7A >?' FUA' = F<7AC' U?BFL347?' ‹F' 3C' 4@73A' - 7<7. CC?' % +.)' # ' ' * ' @ * ' ;% 5', + ' L7A I' B&7AV I = >C[?' Q3'7' =>87?' - = 7>‹. Q3C7 F''4@7' @FC7 I

& (, - ' N 8 $, I ' * H &0L ' (#, ' 8 +Y '8$&, ' % ''8 , , '5'8 , '5F6' 8 , &' ;' 8 ("&, ' ; R' 8 &&, N& ' R' ' 8 &", & ' 5F6') ' 8 &", '6' 8) , , & 6FV' 8 &(, & ' 6F' 8 &(, ' Z ' $!' +! ' $& # YW &#! ' I) &' >$o !(G ! ' Y +&&' *

" I' 6@FC743B' &>Q' 4@7' Q ' Q>?' ‹AF667‹' 3C' 4@7' CF = . ' ?3CV ' 3C' '>C‹' A74>3C7‹' 3C' 4@7' F' 4@7A' !FA = ?' &4@FUV@' 4@7' A7 VU&>A' 3C' &7K3FC' 3? '4@7' = FA7' BF = = FC ' 4@7' FM&3YU7' B>?7?' >C‹' 6 '>A7' ?F = 743 = 7?' ! FUC‹' >???= 3&>47‹' 4F' 4@7' CF = ' ?3CV ' >?' V7C ' >C‹' <>4 ' $ B ! ' (‹>4 ' >@?F' 'B ! %‹>?' 'AF = ' >'3(. ?47 = 5 ' 63 ' $ 3 ! %B i' * ' '

)' KFFF3C' >637A' W ' F * ' ?0% ' @ % %B' '+ ! % Z' =>7‹>' %'%, ' '(' '+ '67' M&F?4 = 7' V3CC76' ?6 2&3CV7' >C‹' ?6A7‹7' "7F I$7 3C7' 4A7F' >C‹' 78' FC' = 7‹7 ')'% , (' C)& , %*, , ' 3C' ' ' ' %)' C' >C7' 7‹7' I&(>4 C7C' B&7F637E' U I 47 @7' 4A>34FA7?' = 7‹7- ' 3 , Q ' ‹ & ' ; F&2?5' %%, ' 3A' FC' V3' '>A‹' 'A>= ' MAU = 7 '7&‹' 6U‹7A' ?FC7' BF = ' F' 67' B>?4&7' = 7‹' &3@FU47' 4FUC ' & ' @ * ' V = MAFU‹7‹7 Q>?' @7 ' >?' 34' Q7A7' >' = 7‹7' &' 'U&' F'' 'A7??@7' '&FUA7?' Q@ I 47' >C‹' A7‹7 ' % ' & ' +%' $ % ' J $ ' ' %‹' C‹' >&& A7 = U ' '34' 4@7' = 7 3‹' ?= 7& 4 ' % %' & ' 6% '3 ' "' L ' @7' 77BFC‹' P83C‹' F''V>A&3B8' VAFQ74@' 3C' = I‹‹7?' >C‹' '7&‹7?' 3C' 7U7A I' BUC4A7 ' + * ' & ' 0+ 6 ' ;% * 5 % ' 3U7A?' ?Q7747' >&FCV' 4@7' = 77‹7?! ' % (' ' % ' '='))' ' >&&' 4@7?7' MFUC‹?' 34@' 6&7‹47FU?' 3U7A?' >C‹' Q3‹7.?83A47‹' 7>‹7?' 7' = >87' ‹@77' >‹I ' K)K>' # V '@* ,0* 6' K33' %) ' ' VFF‹&I' = 7>‹' Q@3B@' = 7C' 4@7A7' B>&& 4@7' 3‹7 ? %*K ' (' 1 '%JS ' @ * $ @7' &FF?[‹' FA?7' ' F = 7?' ?&FQ&I' VA>3EX4C4?' A' '" 7CH>= 3C' I 7CC ' 4QF' @UC‹A7‹' >C‹' '3'4I'>BA7?' F''&>C‹' Q@7A7F" 4@7A7' = >I M7 4@3A4 I' F'' = 7>‹ ' ' % 6' (#,' *$6 '(+' $' 8&(, F/ (=&7 ' ($ ' 8&(, *' 7(#, ' 8&(,' / (++' 8&(, *' / (++' &+ '@*%'/ % ' ; 8&(,' / "8 , '8&(, *' 7(#, ' 8&(,F8 #!%' O: (+"F!$D - ' (#' (77&/&,' '#("T&' $ ' Q: 7) ' h' 8&(,F (!!7&' (' / :#,' "=)' ' + &&, *&77 ' "E 8&(, '+"7=&' N+&&' O: ! I

-- . ' ' % %' F % *' ' ; F = 7A?7‹' 7B' FB 5' +' 34' YU3' ?F&LUC‹4 - 7‹V>L7&' **' P ‹ 4 ' ' ' ' + ') , ' '))' U‹' &FL7A' 7>A&I O$ 7><VA>??' &>47 ' + ' 3C' ,%'' @%/ ' ; >=<7C5 ,' 34@' L33H' >BA ' F'' - = 7><7' VAFUC‹7 ' K *K'3C' ' ' UAC7A' ') ') ' 3 - * ! ' ;% 5)' I1L7 ' >BA7?' F'' = 7><7' VAFUC‹&I3CV' 3C' " F4&7 I' = 7>‹7 ' 3) K' 1 ' '@ % * ' F ' ';%) 5 +' C' - = 7‹7' = FC4@# >I'43 = 7 ' *%+' 8 & = M ' * 0')+ (' 6 ' $ ' * ' F47?' %%)' U&I' Q>?' B>&&7‹' >?‹7. ' = FC> ' %!0 *' & ' % + ' 0 # ' ? ' + ' L = ' K‹L ' FL7‹' 4@7' >= 7' 6>?4UA7?' Q@7C' 4@7' ?><. = FC4@' ?= 3& ' + ' / %' ; C7B‹' KFC 5' , 0%' % ' / * + ' 0' $ ' ' ! %' $ % * ' % ' ' - = 7‹7A>4737' ** ' ' ' F % ' ;7‹' 4 ' *6 %$,' @7' 6>A3?@3FC7A?' 6>I'CF' 4 @7.@>I ' MU4' >' BF = 6F?343FC ' F'' ! '>C' >BA7 ' Q@3B@' 3?' B>&&7‹' - 7><' 3&L7A ' & ( ) . + ' $ 8' $' ' 6 & (, ' & ' .+' $ 8' $' * & (, & ! % ' $ & ' ' $3 ' @ L ' $ % ! ! % * (' 8 , ' $ % ! ' ' ! ! 4 &:! ' !) &' B $ B / % 8*0% ' $ ' ! % &' + . ' & &+&#!&, '"#' ' ') ' 8 * & %' KF^F F * '3C' A . U&B&B7A' , 0 ' %) % + ' + - %) - 0' ' ' + '-%) - % ' ?3(M7A7C‹' + ' =>7@A7 ' 6 ! ' Mce cT @ ') ' =>7@7A>?' Z3 ' ! ' * ' '3C' ' ‹' K?# 7A> (% +5' '+ ' @7' = 7><7A' Q>&8?' 'FA@' Q34@' @3?' ?B I 4@7' FC' @3?' ?@FU&‹7A' %) +' ' * ' G ' * ! ' 3C' - $ ' * ' - ' * ' G ' >A' % ' % ! ' >' = FQ7A $$&(, & ' .+' $ 8' $' ' 6B & (, ' N 8 &1, eL[I' 8 +Y "' ' 'N .7"O : &' (+&+I' 8 , * &-' 8 p , * (HH ' % - - , * (' R' 8 &, : * & 5F ; ' 8 " , : ' 5FR' 8 &, * & ' 5F6' 8 &, & * & ' ; FR' #"&, : ' 8 &, & ' 8 &, (* ' ; F6' 8 &, ' ; -V 8 &, * N& ' R' $ R ' ' 8 &&, & * & ' " : V , & * N& ' RF6' 8 ", ' * ' 6' 8 &,) ' #"&N (I , , * & ' 8) , , & ' 6FV' 8 ", , * ' "%&(, * & ' V) ' 8 &(, : ' 6F' 8 &(, * ' Z & ' - &! G ' .7"O : &' '(+&' $' $ &! ' +!$' $& #' N + - ' I' '&: ! ' &F &: ! E $' ! N * %&#' &' * ' 4

@7' 6A7B3?7' ' FA = >&' 7YU3L>&7C‹' <F7?' CF‹' FBBU‹' 3C' >C I ' F4@7A' 7U4 ' &>CV ' MU4' BFVC>47' QFA<?' F'' ?3 = 3&>A' = 7>C3CV' >A7' ! A3?' $! ' U ' $ %! %' ; ! A>CB85 ' U ' ' $ %! ' 7>A&I' = F<' U ' $ % ' ;CFQ' $ % 4' ' $ % ' '% ' ;= F< ' $ % 4' 77' >&?F' A3V3C>&&I' >'637B7' F ''&>C‹' 67A = >7C7 4&I' BFL7A7‹' Q 34@' VA>??' Q @3B@' 3?' = FQ C ' 'FA' U?7' >?' @>I ' C ' &>47A' U?7' F ' 47C ' 7K47C‹7‹' 4F' 3CB&U‹7' >CI' 637B7' F ' VA>??' &>C‹ ' Q @7 4@7A' U?7‹‹' 'FA' BAF663CV' FA' 6>?4UA7 ?' >43‹' 3C' ?F = 7' <3?4A3B4?' >66&37‹' 7?6 ' 4F' >' 4A>B4' F ''&FQ' Q 7&&AQ >47A7‹' VAFUC‹ ' U?U>&&I' C7>A' >' A3L7A Y47' % ' '73AB@' % + ' %3 ' ' ,' C' C37‹Q>' M7.' C7FF>C' M>7=' @&3M7 ']‘M] ' @ ' ;3K4' F = 7?' @7F' ?7F 7C = 7‹7Q7C' @7F' = 7FQ7C ' 6 ! ' + %*' 7‹UQ7C' >C‹' = FA7?' G' M>' @>?H7' = UC47?' ' ' ' ' ' $' , %+0+ % ' '>3A' 7‹Q7' @7' ?>3 ' Q34@' ?Q747' '&FUA7?' %' >5AA' + * ' ' + * ' C' 5 (4' = 7‹U' ?>' &>CV' M>3 Q>A' 6>4' 7447C' M>3' @>‹' 34' 7A4@7' M>A7 ' L ; S FKM 5' KKK333 ' %+ ' && MJ' 4I = 7?' F'' MJ' 7A7' 7A M>3A7' = I‹7Q?' VA7C7 ')' ; 5A' , F ' ; ' FKM 5') ' F = 7C' Q>?' 4@7' 83CV' F'' 83CV7?' C‹' >A = 7‹' 3C' 4@7' = 3‹‹FQ' AF‹7 ' >;65 C + ' , ' J ' ; >= ‹7C5 ' +' @7' = 7‹Q7' >4' ">MQ7&7' >;44 ') ' ; ' ' ' B ' % ' :' , ' 3L7A?' 6>?4UA7?' >C‹' = 7‹U7?' >R@6' @ ' @ ' ; ' ‹7' ' % %5 *+' @7' ‹>I7?' F'' @3?' QFA&‹7' MU4' 4A>C?34FA I ' >?' 4@7' 'AFUA7' F'' I /' = B‹FQ7' K??-' & 6% '%' " L33H ' &4@7>' ' VAFQ74@' C>4UA>&&I ' 3C' Q>47A I ' J' = >A3?@' = I‹‹F7?' R6A & ' 4A' I %' (' * $ $ ' , ' ' 7 I CV' MAFUV@4' 'FFA4@7' 3C4F' >' = 7‹‹FQ7' >C‹' ?4A3667‹' C>87‹' 4@7 I ' Q7A7' ?&>I C7' 7B@7' FC7 ' R44 ' ' ' ' ' 33 ' (* ' ><37.?= FB87?' >&&' ?3&U7A' Q@347 ' F' 6>3C4' 4@7 7' >FQ7?' Q34@' <7&3V@4 (' @R43' 3C' 3) ' * ') * ' ,)' @7' &>C‹3?' F ''4@7' S3CV3?' = 7‹F' M7?I‹7' <3CMUAV@' +>++' 4 & ') ' @ * $ ' 3 ' ' M&FF = 3CV' = 7><FU ' >65 ; ' 3 4A' C% 5%)(' ' ;LF&' 5' **' $ ' =>AB@' 3C4F' >' 7‹‹FQ ' + ' O # ' 4 ' & ' * ' 66 ' * ' ' >I ' @7' A7?4' F ''FUA'HFUAC7 I ' Q>?' @4AFUV@' '3C7' 6>3C47‹ ' = 7><FQ?' 6@4;6 ? 6 '@ %) ') ' ;7‹' ‹C ' @7' 6AF67A' VA>???' Q@3B@' BFC?434U47' 4@7' 6AF‹UB7' F'' 4@7' A3B@7?4' 67A = >C7C4' 6>?4UA7?' >C‹' = 7><FQ? % ' - ' >C‹ ' ' ' = ' 3 ' %, ' FF83CV' >&&' ‹FQC7Q>A‹?' 4F' M7@F&‹' FUA'B@77877' FQ'4@7 I ' >A7' ?4>3C[‹' 3C' = 7><FQ7?' I 7‹4' CF4‹' <AI ' 34@' = 37A I ' ?&3 = 7' &7'4' FC' 4@7 = ' MI ' ' 4FF‹' 2 ' P777 4 ' ' ' MR . ' (#,' :+&,' $ ' 8&(, * ' + ' E 8&(, * ' 7(#,)' @ @@ ' ' * ' ' >C ' ***' ; ' 5' 3‹' &>7?Q7' G' = 3‹' =>7‹Q7' 55A' ' & ' * ' ' ;% % 5 * ' &&7' = ><' @7' Q>?47 I C ' 6>?4UA ' = 7‹FQ ' G' 8FAC ' @R5@' ' 6 * ' ; UA477?5 ' % ' ;% ,5 ' ' 7' ?@>&&' @>U7 ' FA' >' ! 7>A = 7 ' ?F7' = UB@' = 7‹FQ7' A' L6&‹C‹>?' ?M>&M7' ?U''3B7C4 ' ,* ' ' ' ') ' @ ' ,+' 4' 37' 67A@>6?' = FA7' 6AF67A' 4F' C>= 7' >&&' &>C‹ ' 'AF = ' Q@3B@' @>I ' 37' 4>87C ' = 7‹FQ' K (' = ' * + ' C ' $ / ' K ' CdU4\j' MFL7' 'P((>BA7?R >A7' >A>M&7 ' = 7><FQ ' >C‹' 6>?4UA7 ! = ' $)%' (' '7 *' 7&=&7' ! ('!' $' :#' :7? !"=(!&,' / (++' 7(#, '&+ ' (7 #/' (' "=& ' '"#' 8 (+%)' &/" #+' #&(' !%&' +&(' > ' ') ' G' * ' ;% + 5 *' '&7A.?BU&&' 3L7A' 6U4?' 3C4F' 4@7' = >3C' >C‹' FC' 4@7' 77‹4.?3‹7 ' @7A7' 37' L7AI ' VA7>4' >A?@7?' FA' 7‹FQ?' FC' MF4@' ?3‹7?' F ''34 ' 7KB7&&7C4' D F‹' &>C‹' 2 ' ' & ') ' ' %' 74B ' *' C' 4@7' FA4@.Q7?4' >C‹' FU4@.7>?4' ?3‹7?' F ''= 7' @3F ' >A7' &#K47C?3L7' C>4UA>&' = 7><FQ?' FA' >L>CC>@?' 2 ' ' O ' ' ' ' '

7>V7AC7??' %*)' ' ' % ' ';7 ',5 ' @3?'6>&7C7??' >C<' =7>V7AC???F''L3?>V7-' % ' (' % X'0D ' L3/' 33>' @'7'A7>?FC'Q@3B@' 3C<UB7?' = 7' 4F'BFC?3<7A'4@3?' 6FA4A>34' >?' >C' FA3V3C>&' 3?' 4@7' = 7>V7AC7??' F ''4@7' BFUC47C>CB?' (' 4 * ' ' % * ' ' * ' * '** @7' '3VUA7?' ' " IE>C] 43C7' QFA8 M7V3C' 4F' M7' B@>A>B47A3?7<' MI' ?@(6C7??' >C<' =7>VA7C7??' F ''!FA= ' >C<' &7CV4@3C7??' F ''6AF6FA43FC 4 ' B>C43C7?? '&>B8' F ''U&&C7???#' 6FFAC7??'F ''YU>&34 I >2 ' ' @7' 7>V7AC7???' F ''@3?' 7AU3B7' 3C' 4@7 >AA7?' 4LB' 8 ' + ' $ W' ' ' ' , ' @7' = F?4 ?3CB3CV' <7'7B4' 3?' CF4' = 7>VA7C7?? 'MU4' 3C'&>.' CFC')9*)' 'C '3C' ! FA?4 7A' - 'B *C , , ' C'>C47.' ?BA364' Q@3B@' Q3&' 3C<7 = C3' I' I FU' 'FA' 4@7' = 7>VA7C7??' F ''4@3?' ;&7447AR ' E96/' ' < % + 'K3L' ;7<' *C 2 ' @7' = 7>VA7] C7?? F ''4@7' &3?4' F '' AU?4>B7>' >C<' 7?4>B7>') 99-' & ' C%)*''3K'2+ 'P @7' ??>I ?R'>A7'>U?4?A7'7L7C'4F' = 7>VA7C7??'

4 'M ' 344&7C7??' ; F ''@7>A45 ' 6

TM'[$ % '@% ' *' '3'KK3' >'<' CF4' M7C7' 4@>4 'B7A47?' @>A4'@><'MAF83C' ! FA' = 7V&= 7?'>C<'6U?3&>=3437'

& (/ ' "8 '=("(#!' $' " ('

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%) ' : ' ' J * ' ! ' % ' "' M ' @7' Q>?' <7&3U7A7<' F ''>'6>&7 = 7>VA I 'Q 7>87' B@3&< C>= 7<' 3B8C7??7 '

& (/ : & ' .+ ' $ 8' $' " '%

& (B' N 8 $B I ' ! % ' 7+ ' R' 8 &&B& ' 8 &) B& ' R' 7 : &(B& ' V ' 3' 8 &(/ ' 4F3' 8 (B& ' #' "8 7& 8 &#!' * "!%' (' 7 #/ '%(#, 7&' (#, ' ' B&, ' #' .7(, &: +&, ' ! ' : 77' : ' ' ': !' , * #' &(+' . ('B&#' &&, + ' &!'

7+ ' / %B$ %& N+&& . 0 D8' / % 0$ %& N+&& ' 6' RI

%+* % ! * ' '; ???K5' * + ' * ' "UC<&7' ' F ' % ' F&.' Q7&BF = 7' FU4'Q34@' >'Q767C'B>&&7<' >= 7I87 ' *G % ! * + & ' C& ' ; FKM 5' %% ' $ 6>#<' A>L7&I ' 'FA' LH ' = 7787?' % * ' U?? ' + 6 ';% * 5 * ' = 7>87' 'FA' 4@7' 67>?7 ' >C<' 4F' ?Q3CV7' L6' 4@7' MA>87' %)*+' 2 ' *) ' J * ! 'e ' ' % ' FA' %& ' >' 7>?7.@FF8 ' - < ' 1 ' % ' ' ' = L33' % ' 7 ' 4U4?' 4@7' A77<?' <FQC' >?' <776' >?' Q7' B>C' Q34@' >' = >87 ' >' 83C<' F-' ?@FA4.M&><7<' &FCV.@>C<&7<' ?BI 4@7' % ' -' ! ' C ! B' 74B ' *B-' C *% ! 6% ' ! ' *+' 3?] 4UAM7<' MI' = 7>8' FA' BAF = 7' 4@>4' <A>V?' 'FA4@' 4@7' &>= M ?.4>3&' &#' &' &(B' B' % ' ! ' ' : !' * '!%' (' 8 &(B' ! % ' %6 * ' % >' ' ! * ' '* ' 'K333 ' ' @3B@' >A7' IFU' VF3CV' 4F' <FO = 7>V' FA' = FQZ' 7&& ' Q7 <' M7447A' = 7 (' CFQ' 4@7' Q>47A' 3?' U6

& (B&# ' .+ ' $ 8' $' #

& (B&#&+ ' .+ ' $ 8' $' +-B +

& (B": /$' N 8 $2B"OI ' 6V' 6' %+ ' 7+ ' 3' 8 &&B"#/ ' ZL' $' #' h'F"'$ ' \' #7)'"# $ %& ' * ' Y É %&' ! 7' :+&, ' .)'' (:7B& i' ! : # 7, ' (B: 8' : ! $'!%&&+&(8 +.&$ &'"#+& !"#/'#&* ! N 8)!%'>46VI

BBFA<3CV' 4F' 3C' FA = >43FC' ?U66&37<' MI' A' ' AFB87A')'' F<BI>A<' 7LFC6FA4' 4@7' 47A = ' 3?' CFQ' F'47C' = 3?] >66&37<' 4F' 4@7' $ %& ' 0 *' ' Q 4 ' 6 ' 6' % 5# 4@7' '3A?4' YUF4 ' 3?>C' 7K>= 6&7' F ''4@7' 7AAFC7FU?' U?

\ 0B ,) 'V ' ' ' ! Q ! * $ == $ * ''3 9)5' ': 3303 Q F' ' ' ' ' 6' 6' ' ' ' ' ' ' ' ' ' ' ' # ' ' ' T & ' ' ' ' ' ' ' ' ' ' '

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8 ; %H) 8 / ? J ! ; @

8 ; % .

@' #!& 8&,"(!&7)' N"#' !" 8 &' ' '%(('!& I
% + ' & % ' ? ' B '@ * ' B > C * ' ! FA' 4@>4' 4@>4' @77' 4@>4' 3?' FU4&>Q7<' Q>?' 7 = 6A3?FC7<' 3C7>C7' M74Q77C7' 4@7' >Q>A<!CV7' F'' 4@7' 7K3V7C4' >C<' 4@7>Q437' 6AFCFUCB7<' %)% ' 3 ' % (' ' ' *' @7!'3C' VF3CV' = 7>C7' M7.' 4Q7C7'4@7' @3&F?F6@7A?' F63C3FC?' >C<' 4@7' 7>U7C&!<'FB4A3C7' >A7' 6&>3C&!<'7B73U7<') 66=/6' ' ' 2*
@3B@' F''3B7' 34' ?77 = 74@' 4@>4' @7' @>< ' = 7>C7' M74Q77C7' 4@7' 4Q7&!'7' >C<' 4@7' 'FUA7477C4@' I 7>A7' F''4@7' ?>3<' 83CV ' %' %), ' ' '8 ' %G'B > >C *>' C I' ?UB@' 4@3CV' <FC7' = 7>C7' M74Q3K4' 4@7' L7A<3B4' >6<' 4@7' 3U<V7 = 7C4 ' %)+,'4A '@ & ' (@ *-' C& ' K3' .' ' ' '' = 7>C7 '>'47A' 4@7' '3A?4' <7 = >C<' >C<' M7' FA7' 4@7' &>447 A' 7C<' F ''4@7' = FC74@'4@7'&'??FA'<F7' @>667C' 4F' BF = 7
#!& (77' N: #I' g 7' ('!' (#,' (' 7& ' 8 &(#!' N8&#!I' 8+'Y '" #8#(#'5' 8 "#&#' 5FV' 8&# 0' 8&(#&' ;' 8&# ' 8&&# ' ;-R' 8&(#&' ;F6' 8&"#&')' 8&)#N&'R' 8&###& '6FV' 8&"# '6F 8&(#' @%' ' 8 8#,&' 5' 8&#,&' ;' 8&&#&,&' 8&##&,& ;FR' 8&#&, ' ;F6')' 8&#"! 'F)! 'R' 8&#) , '6')' 8&)#, ' 8&"#, ' 8&N"I#"! ' 6F3' 8&(#&, ' N6')' F"!I ' H ' ;FR' 8&#!& ' ;FV' 8&#! ' 6F' 8&(#!' @%' / / ' %' ' N+&I 8 &#&, ' R' 8&##&, ' 6F3' 8&(#&, A ' ;FR') 8&#!' R' "8 &:!&' "8&)#!' ;FR' 8&#!& ;FV' 8&#! '6F' 8&(#!' Z 8 ' & Y ' '&'%'' ^' "+' $ '%'! ' +"/#"$)' 8 (B&B# *#N I: D*H[-[8 , #' $ ' '4' F' $ ' '! ' %(=&' "#' 8 "#, ' N%&#'&' (7+ ' ! ' 7 =&! ' ! ' "#!&#, ' +"/#"$)' 8 (B&' B# *#' 8&#!" #'N ' (#,' 8 , ' $ ' ' '# *' '%"&$7)' ! '%(=&"#' #&!+' 8 "#, ! % 7, '&9 &+'+(#' "#" #!' '$' !%&' 8 :#,+' ' $ B' %'!' ! 8 (B&' B# *' ' $ ' ''! ' '7("8 '+% *'$!%'6 $ ' '' ! ' ,&' &&' ,&+!"#&' ,&,"'(!&' N*%&#'&' 6 $ ' !%' !&+!(8&#!I' %&' '(#,"#(="(#' $ 8+' '&7' $ '%' * ' $ '+' (' $ ' ' (&' $ 8' *' & 8(#
@7' 7A'>$ % '8% ''3?' BFVC'Q' !A3?' ' ' 'F63C3FC' '$ '%'7 = 'Z'F63C3FC';'FUC<'FC&!'3C' 4'A3<'3C' 7A4>3C' 6@A>??' '%' $ '%' ' %' $ '%' 74B ' = 7>C3CV' -L7A3&!' 1'FA?F64@'[5' U4?3<7' 7U4 '4@7' &' 'FA=>&(' 7YU3L>&7C4' $ ' '7K@3M34?'>C' 7K4A>FA<3C>A3 'B&F?7'6>A>&7&3?=F'' = 7>C6 3CV @>L3CV'>&&'4@7'L>A37<?7C??'F''4@7 " >C<' -'L7AM' @7' U&43 = >47' 74! = F&FV1'>C<' 4@7' FA<7A'F''?7C??.<7L7&F6 = 7C4'>A7' <FUM4'U&#' 4@7' 6A7L>3&3CV'L37Q'4@>4'4@7'AFF&'?'>'T 'd'4F'4@3C8' ;?77' ' ' 6 4' QFU&<'>BBFUC&'6&>U?3M&!' <3''3BU&437?' 4@>4' @>L7' CF&' M77C'?>43?'>B4FA3&!'<3?6F??<'F'!#
' %' ' '%(=&'"#' 8"#,' (+' (' : +&' '"#? !&#!" #' ! ' : +&' ,&+"/#" %"&$7)' *"!%' '-' (+' .0 '7&++'$ &O:&#!7)' *"!%') %+ ' ' 6
C' = F<7=' BF&&FYU3(' U??' ?F = 743 = 7?# F'3C47C<' Q34@' <7] 47A = 3C7<' 6UA6F77
!FA' *' $ %''6 ' ' $ & -'?77'4@7'?M?'
B 'S'3(! 'C* 'KKKMB :' '6>' FCV>C' @7' ?6A7B>C' ?Q3 7'3FAA>C' I = MU4>C'?Q3&B7' @7' C>' (?6A?7B7' @7' = = C<7 I' G' 43F@F<7'@3&' 7>@' @3<7&Q7>A<?? ')'% ' ' 'F *+,'6>C'>&FC' ??M7' &7'4' $7A' 3CC7' FC' Q3?4' Q@>4' ?B@7' = 7C4
?' ' ' +,' @FF' @><' 8 I CV7' ?>UC<7A' I.= 7C4 @7'B77' M>U7' I.6>???<' >I73C') '% *+' # * ' + ' C' ,' :? 35' C<' ?I C' I ' QFF4' 6>4' = I C' 7C47C4' 3?' <7C7' ' >8' @7<<7' 67A-F'''FA' $ CFFC' I U7&' = 7C7' %++ ' * &' ,'KKK (+' 'Y = 7AB I 'FA<7' = 787&I 'CF' = >&B7' Q7' = 7C47' %) ' & '4A' !% ' * $ $ ' @7' U8?' F'' >K&C7<' >C< 4@7' >C4VA>L7 ' = 7C4' 4F' VF'@F = 7' %)*' '@ ,' *+'))* ' $' % ' 3A' >&7?437' = 7C3' 4F' ?UML7A' 4@7' &>Q3?' -K+K' = 7>C7' 4@73A' ?7AU3B7' ?@FU&<' M77' = ><7' MU4' 4@7' >BB7??>AI' %)%*' 4 # ' ' ' + ' @7?7' BU4.4@AF>47? = 7>C4' &A7] ??C4&!'4F' A74UAC7' %) ,' CIM ' * $ ' ' %%' ' K3' @FU' >A4' FC&!' 3?6&>C47<'3C'>' M>?7'<7V7C7A>47' F '#'' U4' >4UA7' Q@7C' ?@7' = ><7' 4@77' = 7>C4' >' 6>A4>C' ** ' < ** B' !' * ' 3L' FU' FC&!' = 7>C' 4F' M>C47A' = 7' + ' ' H ' 3 "M ' * ' 7) ' ! '%%' L333'+ ' @7' "7&FFB@?' 7A4>3C&!' = 7>C7<' 4F' MA7>8' U4' Q34@' >' BFUC47A' >44>B8' 2 ' 5 : ! s 3C' %G' $ / && ')) 0,' 7' = U?4' CF4'HU = 6' 4F' 4@7' BFCB&U?3FC'4@>4' 4@7' 7V3?&>4UA7' = 7>C4' 4F' 3C47A'7A7' Q34@' BFC4A>B4?' % +' 0 5' < %% '@ - B' '@+6 ') '33', ' L7C' 4F' = I' I FUCV' >C<' 3C7K67A3] 7CB7<' 7I7?' 34' ?77 = 7<' 4@>4' 4@7' >44>B8' kFC' 4@7' 7<>CF' Q>?' C7L7A' = 7>C4' i
!' . ' * "!%' &77" +"+' $' = .E $' 8 !" # ' ')'%+*' ') * ' ' 3 ' ' "!%' +%) &+' 9"" ' ! ' !(7)' %(,'4@7I' = 7C47
!' ' ' ("8 (!',"&'!' #&2+' * ()' ! ' % + ' %+!' *,'C& ' A7 4' ?7M>=7' 34' 3? @>4' Q7' <UA?4' C7U7A7' AFL7' = 7C7' %) ' $ / ' &' @*) 'L3' @F'>3 = 74@'>4'4@7'(I' @FF4?' @3V@7A' = U@8' 4@>C' @7' 4@>4' = 7>C?' >' 4A77' %*)' 1 * ' ' ' ' HFF' @7' = U?7' >?B7C<?' @7A' @7>L7C&!B>A' C<' B&3 = M?' 4@7' ?4776 I' 6>4@' >C<' = 7>C?' 4@7' 4@AFC7' <3L3C7
' ,&+"/#' N(' !%"#/!' $ ' (' ,&$"#"!&' : +&2' ! ''"#!&#,' ',&+!"#&' N(' & + # !%"#/!' ! ' ('$(!&' :+&' % & % ! % $ 7+ * "!%' 8 7&8&#!' 4F' ,&+!"#&' ! ' .&' 2*6 4
%'%+ ') *' % '% ' &-@7'F&<'7 = 67A7??7' @><<7'4@7'?>=7' H V7 = 7C4' @>4'?B@7'4F' !&FA>CB7'@><<7' I - = 7C4' % ('$ 4A' !%' (' *$ $ ',+>'M' @3?'Q>AA7'3?' CF&' = 7C4' CFA'6!7.' 6>A7<' >V>3C?&' 4@7' I437?' ' ' '4 'KKL33'L' @7C' VA7>4'7VA37'7?'4F' = 7'M7' = 7C4' C'4>M7AC>B&7'@3?'@7'Q3&&' 3<7' = 7' K)3K' ' F ' >F' F<' = 7>C4' 34' LC4F'VFF<-' %)+' 4 ' *$+'*) ' @7'P'B' >UA7R'VFF<'B>A7A(?? 7>C?'@7A $3AFL3??FC' FC7&!'4F'4@7'VFF<' @>4'&3L7>BBFA<3CV'4F'@7A'?FM7A' >Q?') ' ' F ' ' 'L'33' AFL3<7CB7' = >< 7' = 7' Q FA4@' >' ?4A>CV7A?' 6374!' @F = ' IFUA' B@FK3RB7' = 7>C4' 4@7' AU3C7' F'' = I' @FCFA' %)+' ' ' **/ (' ' 2' !>3A' 3M7A41'6UA?U<' >C<' = 7>C4'>' A7!F' I>Q&777' 6FQ7A'@7A7' 4UAC[<' -* -' -' / 1 >)' *' / ' ? ' ' ' @'4F' ?= >&& A7>&= ?' 'FA'7L7A'A7?4' BFC'3C[<' UA'VA7>4'>''7B43FC?' = 7>C4' 'FA' >&&' = >C83C<'Z' % +,' $ ' *+ ' ' !8%'L' A7' $' 6A37<' ?@7' k!>47I'?@FU&<' M3<7' && 4@>4 ?' = 7>C4' = 7' % + ' ' ' ? ! * % '' *9 $ 4@3C8' !>47' = 7>C4' U?' 'FA' 7>B@'
4@7A' %)' 'c' * ' */ ' % !' K33' >I' '3K-' Q@>4' 7A7' @F6.I>A<?' = 7>C4' A(Q@I' Q>?' "UA4FC' MU3&4' FC' A7C4'Z
& ' '"#!&#,' N(' &8(B' (77:+" #' &!' I' !e}' %(=& (' (!"':7(' &&& &#'&-' #+!' $' !D H' B * 7+ ' '(.+7' *' $ %''6,' B' =*"#!&#,' ! ' &&& ' ! K C' 4@7' K)4@'B' *' $ %'' ;>' A7 = >A8' FA' >' <7?3VC>43FC5' ,';>' 67A?FC5' Q>?' 4@7' U?U>&' 7K6A7??3FC' Q@7A7' Q7' CFQ' I' 14Y' = 7>C' ;?UB@' FA' ?UB@' >' 67A?FC5' MI' ;>' A7 = >A8' 74B 5' -+4@7' LM'] M73CV' 4@7C' 3C' ??C77' , %K ' S' 8?' 0,' @>4' = 7C4' @7' MI'4@7' &FA<7?' F''4@7' YU7C7?' 83C<A7<' 4@>4' Q7A7' 4>87C' M7'FA7' % +,' : ' % $ ' /*/ ' , 'M' 7'?>37<' 4@>4' @7'QFU&<' &7>U7 ?UB@7' >' ?UBB7??FUA ' 7CICV' MI' 3M7A3U?' % * ' % ' @* $ ' -* $ 'K3K' ' FC7'3?'4@7' F I>C<' V I<7' F''4@3?' >43FUC#' = 7C7' M7' >= ?? ' 7V7C4' F'' BF4&>C<' %) ' ' 8?' ; &FM75'),%9$' <F' CF4' = 7>C7' 4@3?' MI'4@7' A3CB7?' Q>A<7?' %)+%' ' $ ' ;%) %5 ' % + ' '&>UC43CV' @I67AMF&7' ''>A'M7IFC<' 4@7' = 7A3' F''4@7' >A4I'@7' = 7>C4' 34' 4F' %*+ ' ' ;%* ,5 ' ' ' 74@3C8?'7L7A!'4@3CV' 4@>4'3?>3<' = 7>C4'>4' @3 = ' %* ' 6 ! ' %' @7I'>A7' BFC] L3CB7<' 4@>4' 34' Q>?' = 7>C4'>4'4@7 = ' *! ' $QFC<7A' Q@74@7A' @7' = 7>C4' 34' F''>CI' FC7' 3C' 6>A43BU&>A $' ' .&' 2G ' &!' I' "#!&#!" #&,' ,"+ +&, ' #+!' *' 6, ' !% A1>' # ' * . + == ' %% ' ;%)+5 "I.?7B@ICV' @I=' @>4' @7' QFI<7 787' = 7C7Q7&' 4F' = 7' %+%' (## o ' ' @ ') ' %)' "U4' @FQ' ' ?6787 '>&V>47' ' = 7C7' Q77&')'%+(' @ * $ ' /@ ' ,0,' 7CICIC' C7A47' Q7&' FA' 7LI&' ' '!*')'%+ '4A' $ % * ' '%' K3 ' % ' 6FU(' Q7' <F' Q7&' G' = 7C7' Q7&')'OMQ^' ! ' ' C%) *' ' L3 ' FQ' ?2>@>A<'4A37' FQ' >BI' = 7>C74@'4F'@3?' FU7A>3VC7' FA<' K)F3' (+ ' '333',,' ''IFU' = 7>C7' Q7&' FQ' VF' Q34@' = 7' %), ' & ') *)* $ ' ' +(!' %*' 7-6U4?' @3AC?7&'74F>VA7>4'<7>&7'F''>''&B43FC'4F'@3C<7A'4@73A'6&F4?'>C<' <7?3VC7?' Q@7A7' 4@7I' = 7>C7' 'A77&!' >'%) ' / $ ' ;%* 5' ' @7' 6UA7?4' "UA3C7??' F''FUA'X7>&' ?' MU4' 4F' 7AA' MI' = 7>C3CV' Q7&4' %*%' $ ' 3 ' + * '33' K3' FU' ?77 = '4F' = 7>C' @FC7?4&!' **K' :+' + ' ' K&L' ;% , 5 ,+' @7I' Q@F' FMH7B4' 4F' ;@3?H' &>?4' &7447A' 734@7A' <F' CF4' = 7>C' @3 = ' '>3A&!'FA'K74B.R' K F>' / ' ' , (% '33' + 6AFH7B4FA' F''>' C7Q' <F = 7?43B' = 7<3B3C7' = 7>C3CV' Q7&' MI' @3 = 77&'>C<' 4@7' 6UM&3B' % +' 1 ' (%% -' %G ''33' ' <F' CF4' 4@3C8' 4@>4' IFUA' BFU?3C' = 7>C7' 83C<&!' MI' IFU
' %' ' "'#!&#,' ! ''#,"' (!&' N(' & !("# .0&'!I' ! ' ! ' #=&)' N(' & !("# +&#+&!' #&' 8&' :+"#/' + 8&# * ,' +&#!&#'&' +"/#"$"' (#!' (!" #' &!' ' 8&!" 8&+' *"! ')%+ '(+' .0' #' 8 ,' :+&' $!&#' ' #+!' 6,B)' (' S'3 ' C* 'KKKL333' ' Z'E3''M7' @>A>' C>C' CI47' @FCC7' C>&'@7' @Q>7&'@7' CU7C ')'+ ' C % 'F ' ' KL333' 2' F<' @>' H7F67CU<7' MA>@>=7' @Q??&'@7' = 3<' @(A7' ?6C7B7' = >7C7<')'K>FF' ' ' * $ ' %%% >4' @7' @F 7 >6F?4&7' = 7C7<' @' M7'CQC7<7'C(4'><C'C37@47?'<B<7')' 2 J * ' % $ % %' ,' 3C' ') ' 7F' CU?747' @Q>4' @7F' = 7C<7' @7F' 77' * 'QI447' 6F = 7 ' -, ' + * ' %,) %' ;(U>4' @7' LA3&' @3?' FA<7?' = 7C4' 4>3&C&3' Q3?&' @(<' CFV@&' @' 7C47C4')' * ' % ' 'KL' 2C% %6% 4' (' I'' H7' Q3&&' Q3&' YU@3>&' L7' = 7IC7' ((' # +' B D ')' C<' ?U = ' = 7C' ?737C' M>&' A3?&' = 77C3<7' @>&' @7' @3 = ?3&' 37>' = FA7' C' FFC' "'>643?4' *+' ! ' 'Z' !)% ' % @7' ><<A7'F''M7U7C7',' = 77C7' B@>A3477' 'T ' '8 ' ' ' AF&' *' U3B@>C<' FUA' 4FCV3?' 67CUA347' ' = 7C7' <'44F BF = .' F'' >3A' >4IC7'P74B'K') **:' ' *** 2 ! 'M7B87<' ' = 7' MU4' !Q!?47' C>4' Q@>4' @7' = 7C4' >+' 4 # 3' ' '3') ' @7'4Q 7&'4@&I Q 77'AF<7' 'FUA7' = 3&7?:' = 7>C3CV' U4B@' = 3&7?5' %)++' $ % ' C*! ' K 333' :2 % ' 3?' = FA7' C' @>3L7'7K>=3C7<'4@3?' Q7'?@>&&' LC<7A?4>C<'3C' Q@>4' ?7C?7' 34' 3?' = 7>C7<'4@>4' = M@FAA74@' 'AF=' >U=@I ') /6)' 4 ' @ ' ' >' ' = 7>C' C<A7Q' >C<' 3=FC' ,6,' ! ' / ! ' F' (' *' ' = 7>C' MI' 4@3?' FQC' 4@7' 3437?' F'' FC<FC' >C<' 7?43C3C?47A' 2' 3??' & #) %'3L' ' C' MF4@' Q@3B@' P>B' A7&AFF''>C<' BF = 6&3 = 7C4R' = FA7' ??7 = 7<' = 7>C4' 4@>C' = 7' 4@7' 7>A')9.7 2 ' ' + ' ' **2 ' C<' Q (>4' 3?' = 7>C7<' MI' : @7' ,'7>A' F'' 4@7' FA<'[Z_K(' N # * '3C' %G' $ ' / && ')) 0%' @7' B4' <F7?' CF4' = 7>C' &347A>&&I' Q@>4' 34' ?>I?
' %' -' "#' O:&+!" #>' $' !%&' $ 8' &%' !* ' N(' & + #!' $ %''26,' & !("#' ' #, : '!I' '&' ' * %(!' 8 !"=&' '0:+!'$"' (!" #' %(+'%&' $ '"!L
T QS ' (' ' ' F ' '33' 3' @>4' CF' 4F6.BF>4' 3C' ?UB@' Q7>4@7A' $ @>4' <F' IFU' = 7>C' MI' 4@>4' ?3A'Z FU!7' Q7&' 4@AFUV@
$' !%"#/+' * ,+' +!(!&8&#!+Y '%(=&' (' '& ? !("#' +"/#"$"' (!" #' ! '+"/#"$)' '"8 !' ! ' !&#, %'%' ' +' % ' ;S7 = M&75' +*,' >V>' @Q = 4' 3B' = ?C7' i' **'6 3 ' ' Q>' @>44'47#' = U(@7CC' ?M?7Q7C<' UQ' &' Q@>4&'34&'?7 6'G' = 7C76@.')'T ^1' / ' * +'% % 5 ' $?3 Q3?4' Q@>4' 34' = 7C4' % ' + ' + * ' 0'4 ' ; F44' (M>5'1 = 7C[' M>4' = 7C7?'1?F' = F4'34'M7' %+* ' %'3 '" J/.' 3C' @' ' ' % ' F = 7' F'' 4@7 = QF47' 'U&&' &1 4 1 &&' Q@>4' 1 4' = 7C74@' 4F' M7'>?'>'?>UV7A' ' Z T& 2 ' F+ +% %(' % '@ ' + ' ! AF = ' 4@7' 43 = 7' 8C7Q' Q@>4' = 7>C7<' 4F $ FL7 = 7' >' BF = = FC' Q7>&7' ' @>L7' >&Q>I7?' P74B R' %'2 +' 3F 3' & ' / *]')') K67A37CB7'B>' = 7' 3C' >C<' ?673A34' ^U'>>' + ' &&' 4@7' = >47A' = 73C<' 3)KK' / 'F' ''KK3' <' = 3A>43FC' ??3?K' && 7>L[C' Q@>4' 4@3?' = 3V@4' = QC' 6' 1' '9* ' "U4' ?>I ' Q@>4' = 7>C'4@F7?' BF&FUA<' ?4Ag>8?' 3C' ?>LC' K ' #- ' ' ' @ ' KKKL3' >B@3C' >B&>CQQ@>4' = 7>C7?' >&&' 4@3?Z
h ; '(' %' ' '%(=&'3C' = 3C<'! ' &8&8.&' 6' T ^'1' / ' %'!' ' ,'' ')) *+' FC7Y = 7C7?4' MFU' C>&' Q@>&' I' 7A' ?7I<7Z' (%+, ' ' ' +' *-' ' ' ' I'' ?' = 7' VA>7R' VFF<' B>47A(?? 7>C?'@7A $3AFL3??FC' FC7&!'4F'4@7'VFF<' @>4' &3L7>BBFA<3CV' 4F' @7A' ?FM7A' >Q?') ' ' F ' ' 'L'33' AFL3<7CB7' = >< 7' = 7' Q FA4@' >' ?4A>CV7A?' 6374!' @F = ' IFUA' B@FK3RB7' = 7>C4' 4@7' AU3C7' F'' = I' @FCFA' %)+' ' ' **/ (' ' 2' !>3A' 3M7A41'6UA?U<' >C<' = 7>C4'>' A7!F' I>Q&777' 6FQ7A'@7A7' 4UAC[<' -* -' -' / 1 >)' *' / ' ? ' ' ' @'4F' ?= >&& A7>&= ?' 'FA'7L7A'A7?4' BFC'3C[<' UA'VA7>4'>''7B43FC?' = 7>C4' 'FA' >&&' = >C83C<'Z' % +,' $ ' *+ ' ' !8%'L' A7' $' 6A37<' ?@7' k!>47I'?@FU&<' M3<7' && 4@>4 ?' = 7>C4' = 7' % + ' ' ' ? ! * % '' *9 $ 4@3C8' !>47' = 7>C4' U?' 'FA' 7>B@'
8 ; % .
* $ % '*- ! ' @7' >Q I?' = 7C I<7' @3A' F''@3A' ?FCV7' %+ ' C & ' 3% ' ! ' F ' ;" >CC' & 5) *' 7C7' L6FC' HFUA' @7B@4' ,++,' 6' 1 ' '' ;% ++5 ' *' 4' 3?' 4F' = 7C7' >6FC' 4@>4 FM7A4' >?FUC' >C<' 3&M7A4' >?FUC' FM&3?4' 4@7 = ' 43&' >' @FCFUA>M&7' 8C3V@4' % % ' $ % ' ' 'K3' AF&' (*,' &&4@FB@4' @3?' &FA<' Q>&<' = 7IC7' C' @3?' >3<' 7?AU@?' -' ' ' "8 & + ' $ %' ' ^' ' &888.& ' #+! ' *-' 6
% ' ' + * ' '%) ' = 73C?' YU&&?' @7' Q>?' 3C' H"M(4' Q7' @7A<' @3=' ?>3' M>4' P74B R') ') ' % ' KL3' 2 % ! % '%4' % 7C3?' 5&7 CFB@4' F'' $7 7Q>CV7&' M>4' 3C' 5&7 83A8' 3?' A7<' L = YU@3&7' F'' = >AI ')' *2 ' 5%6 ' *-' /%6)&$ ' B % = V '%% 0*" 447' >' <7Q7' FUA7 >C< >?' = 7' = 7C3@-' MI4Q3K' ?7K47' >C<' CFC
h' ' ' ' % 7, ' &#!& !("# (# "#" #' ! ' !%"#B' "8 (/"#&' 6
>'K FF' + * ' '%+))' = >?' M7' VF<<' >C<' 4X*+' >A4' = >C' ' F4@' 34' 7?[' BF4@' 37?U?' M>C '1 " >4@' 3' >= ' YU>' A3V@4' Q3&' = 7C') ' ' ' & ' * ' ' J %) ' ; F&#25') ' 1 FA<[' @7' ?7I<7' I'!FQ' M>A' CFUV@4' Q7C7' @I' I' >= ' BF = 7C' H7' = >I' Q7&' = 7C7[' Q * ' ' ! ' 3 ' ' , %' &&3?' A3?4' 3C' 4@7' >&&7VV3<' K(' B@>6347A' F'' U8' ?B@U&<7' @>U7' = 77C7<' >H7C?' @3 = ' ?3&''3C' 4@7' F4@7A' CFQ' >&&7VV3<' 6&>B3?' 1) ' %,' ;%5 % 36A&>CU?' = 7C3' 4@>4' I7' YUI8' ?U&<' M7' 4@7' ?>U&3?' %')769' O #' ; 4?BF4&37 5' *' ')* ' ; 5' % L3A37' = >C' = 7C3' 4@>4' 34' ?FU&<' A7<FUC<' 4F' @3?' VA7' 4@UA4'))/*6' & % ' ;%) ,5 ' ,%SCF4?' F''?4A>Q' >C<' 4@3CV?' ;>?' 4@7I' = 7>C5' F''' 4@7' Q>I' 4F' @7>L7C
' ' '+() '!&77' 8&#!" #'
C *5 + -\ (Q>7?' ' 7FQU&'7?' =?7A F' =?7C7<')' 2 ' @ '%) ' 7&H7' @3&' = >H7C' 3 = UC7C' M>4' 3B@' QU&&7' = ?73C7C' 2KK,,' ' ') ' ' %)' CFU@' @3&' 3?' 4F-' ?3VV7C' ?F' M7' 4' M7' ?B@A3'4' '7<7A' Q3447A&3B@7' UC<7A?4FC<7' @Q>4' 4U' QU&&7' = 7C7C(' % ' + * ' '%(' ;;(F44 5' 7' @><' M>A<FA' Q7&' VA7' 4' = 47' C<' MU?' 4F'3F?76@'3&' = 7C7<' @7') *96 ' ' ! ' ;SF&?5',H' + ' 67I' 6F747?' = 7C7' M>' &U6347A' V3&<7<7' >4UACU?' 2A3+ F' 1) ' %,' ;%5 % 36A&>CU?' = 7C3' 4@>4' I7' YUI8' ?U&<' M7' 4@7' ?>U&3?' %')769' O #' ; 4?BF4&37 5' *' ')* ' ; 5' % L3A37' = >C' = 7C3' 4@>4' 34' ?FU&<' A7<FUC<' 4F' @3?' VA7' 4@UA4'))/*6' & % ' ;%) ,5 ' ,%SCF4?' F''?4A>Q' >C<' 4@3CV?' ;>?' 4@7I' = 7>C5' F''' 4@7' Q>I' 4F' @7>L7C
' ' '+() '!&77' 8&#!" #'
C *5 + -\ (Q>7?' ' 7FQU&'7?' =?7A F' =?7C7<')' 2 ' @ '%) ' 7&H7' @3&' = >H7C' 3 = UC7C' M>4' 3B@' QU&&7' = ?73C7C' 2KK,,' ' ') ' ' %)' CFU@' @3&' 3?' 4F-' ?3VV7C' ?F' M7' 4' M7' ?B@A3'4' '7<7A' Q3447A&3B@7' UC<7A?4FC<7' @Q>4' 4U' QU&&7' = 7C7C(' % ' + * ' '%(' ;;(F44 5' 7' @><' M>A<FA' Q7&' VA7' 4' = 47' C<' MU?' 4F'3F?76@'3&' = 7C7<' @7') *96 ' ' ! ' ;SF&?5',H' + ' 67I' 6F747?' = 7C7' M>' &U6347A' V3&<7<7' >4UACU?' 2A3+ F' 1 ' ' ' '

8 ;%(

' ' ' '7(8&#!' 8 : #' ! '' 8 7("#

Q 999 5 ' ~ ' C* ' K3 ' % ? 3 = 3 7 ' = 3<' QF67' F' = 3<' UCAF4C7??B' =>7C?4' H3 ''=X' >7C377' Q3&&>C' Q>C>' M3 ')'&>P7' . ' -)% ' 6>' QF&<7' @7' 67A' >'47A' ?F337' Q7C<7C' 4F' F=7' >C<' = 7C7C' 4F' A7VFA37 ' - ' ' eeU' F' 67 4' @7F' = 73 Q7F67C' G' = 7C7C' >?7' ?FC' = FC ' C33<7' 67' ?>&= QUAU@47 ' %' . + ' + * ' ' ; F44 5' ^ U3&I ?B@F' = 7CI<' 3C' @3A' = F<B# FC4FA4' BF=' @3A' ?FC7' 'U& VF<7 ')'% *) ' ' % ' L3 ' 2 * $% 4' % ' >A3?3U ? ' 'FA' @3?' L3 '' VA7&&I' B>C' = 7C ') 3B * ' + ' *- & ' ; 5' %% ' I 4' = 7C74 ' @34' = U?U4 ' @ I 4' = >AA74 ' ZAK+ F ' ,% ' ' 2 ' '47' 4 I = 7' 4F.' V7<UA' B>C' 4@7 I ' = 77C7 ' ! FA' CF' B@ I 3<7' BF= 7' 4@7 = ' M74Q7C7 ' ' > ' ' '@* $ ' ; ' ' 5' ++ ' 22 ' '' >&& 4@ I ' QF ' >C<' B>3A' 4' = 7C<?' 4@7' CF(4F' = 7C7 ' %' % ' @ * + ! ' % ! , ' % ' ' 3C' BF44' ' ')* ' C* ! ' ;% 5 ' ,*)' '' IF ' ?@FU&<' <37' 'FA' = 7 ' ?3A' 8C3V@4 ' @7A7[?' ' 7Q' FA' I FU' Q3&& = 7>C7 ' . ' ' ' 8 7("#* -'N(# $&&#, & I ' % ' $ L9' - ' '),' FA' 67' U7FC<' 3?>' ' UAU@4' >C<' F' ' 7A7<' F' ' ?QUB@7' >C<' 'FAF3' 67 4' FM' Q>?' ?QUB@' @7' = 7C<7' F' ' @3 = ' %' &>VF' '+' ' %, *' Q3' QU&&76' = 7C' F' ' = 7' = 7C7' ' 6>@' 3B' @3' Q>AC I>&' 6>4 I 7C ' ' "8 & +' ' ' %' ' ^' ' 8 : # % ' F+, ' J % G ' ; 5' + ' FA7' = 7' = 7C76 ' 'FA' = 7' ?= 7A4 ' 3B@7' B>A7' 3?' 3C' = 3C7' @7A4 ' - ' "#' !%&' +(8&' +&#+&')3 HZ %$ 6 ' * ' '%*' 7C' 67' 4F' @>&37' B@3AB@7 ' 674' 3?' 4F' 6>C' 6A7F?4?' >C<' 4F' 6>C' 'F&87 ')'9(R . 0 ' % +' C<' @7F $ UCC7C' Q7C<7C' 4F' 6>C' S3CV7' 7C<>C' >C<' = 7C<7C' @7F = ' 4F' 7C<>C ' %' Z ') ' ' ' 7C7 ' FU' 4F' @3?' 7>A7C ')' 2 ' ' ' ' 3&' = >A8' @7' V>C' @3 = ' = 7C7 ' > ' 0 ' @ ' @ ' ' ' > ' @7CC7' = FAC7<7' 77<C7' >C<' = 7C7<C7' @3A7' 4F' 4@7' 8 I CV ' + ' ' >$2 I > 2 @7' VA787?' 'FA' 67' VA7U>UCB7 ' >< 7' = IB@7' = UA = UA' G' = 7C3#' @FAC' ?FA7 ')'% + ' + 6 ' ; UA477?5 * *' A747&I' @7' @3 = ' = 7C7<' %* ' 4 ' 1 ' ' J $! ' % ' B 2 C >2 QA' &>??@7<' M77C' >4@' ?@F6 ' 'FA' >' YU>A47AC' 7>' @F6?' 7C' @>A<' @3 = ' = 7>C' @3???4 ' . ' ' % ' ' ' +!(!&' (+' (' / "&=(#'&' ! ' & &+&#!' .)' * ()' $'$ 8 (7 ' 8 7("#!' ' &!"!" #') %+*?' 6 ! '' ';% ++5 ' ' ! 7A?>= 783&' >?' 34' 3?' &>= -' = 7C4>M3&&I' = 7C3#' 43&&' Q?' M7' FUA' &FU3#' F@C7' F'' 67C?' &3&?47A ' 4@>4' P74B R' % # ' $ % % ' ! FA?>= 783&' >?' 34' 3?' @U = 7&37' = 7 I C3#' >C<' ?B@7Q3C' 4F' Q?' M7' >C7' A7L7A7C<' '><'7A' 3C' F<') "' %) 3C' 6F443?QFF<' ' ' ') * ' 333 ;%)**5%+*' @7 I ' Q7A7' 'FAB7<' 4F' = 7>C' FUA' 7?4>47' 4F' 4@7' ^ U77C' F'' CV&>C<' -) ' '@ ,' *+') ')* ' ')% A<>3C] 3CV' M>34@' 4@7' 6>A43?7 ' 4F' = 7 I C7' 4@7' = >47A' 4F' 4@7' ?>3<' 7C7A>&3' ??7 = M&I ' %* ' O & ' * ' ' *- ' @ *) ' ;7<' ,5 ' 4' 3?' @U = M&I ' = 7>C7<' >C<' ?@FQC' 4F' ?' MI ' UA' FL34 ' @>4' P74B R ' - ' ' &+&#!' (' ' 8 7("#! % %' '@ ' *+-) ')* ' ' %%+' @>3' = 7C3#' 4@>= 7' <3L7A?7' 4 I = 7?' 4F' 4@7' FA<3?' F'' 7??3FUC ' %'%)* ' ' %' *+ ' % ' ; 6>&<3CV' &5' ' *' F' ?4A>= 6' 34' FU4' @7' = 73C3?' @3 = ' ??&'' 4F' 4@7' >A&3>= 7C4 ! & (# ' % >' 7+ ' R' 8 &&&# ' RF6' 8 &##&' 6' 8 &)#&' Z(' $ ' ' ' $ * ' ' $' $ '' N+&&' '% 4 ' $ ' ' 3 I ' % ' ' ' 8 &,"(!&)'%++ ' @ * $ / ' @% ' ,0,' 7C I C ' FA' VFFC' M7.4Q7C7' ("0' 6>A4 I 7?' 'FA' >.BFA<7 ' 7B&' ' $ % * ' %++ ' : / ' 33 ' K3K ' ,) ' ''&F@UC' M7' >' 6AFUF83CV' = 77C7' 4@>4' 4@7' S 3CV' (7U7' 4F' = 7' KK(i' 6FUC<' F'' (77A&3 ' 77 34' = >3' M7' ?73<' 4@>4' &F@UC' <FF4@>C<' H7U74@' 4F' = 7' 4@3&8' ' 77 3C' 4@3?' LC<3A?4FC<3CV ' 4@>4' &F@UC' = 77C74@' FA' @7&634@ ' >C<' 'FA4@7A34@' 3C' = 77C I CV ' 4@>4' 4@7' (7U I CV' M7' <FFC ')'3TM5' & '3C' J & ' ;% *+5 $ 6 ' BK ' >U?3CV' 4@>= 7' = 7C7 ' >C<' 6AFBUA7' ?F' 4@>4' 4@7' A7 = >I C.' 3CV' Q34@' @3A' @U?>C<' Q>?' CF4' 6>I 3#' F' @7A' <FQ?A (' %) + ' O (! % ' 0 ' ;%) 5' %(' FA' Q>?' >C I '>???4>CB7' = FA7' &3B7' 4F' = 7>C' >C<' 6AFBUA7' @3?' 7?4>UA>43FC' 4@7C' 4@73A? ' ' 8 ,& (!&' ;M I ''%!& =&#!" #1 ' 3BFF. , ' & ' @* $ ' KKKL ' +*' : ' 47 IC7' 4F' = 7 IC7 ' >C<' V>' M74Q7 IC7 ' C7' @7L3C4?' FA>4A3B7 $ & (E# (. 7)) ' %! B' 6 ' % 1 (' P ' ' ' 4' F.' F \' #' (' 8 &(#E ' 8 &, ": 8 ', &/ && 1 >>' 8 " ' :*, -+ ' G ' 3A' + ' M ' 3U I 3CV' 4F' 4@7' @F&7A3B7' &7??7' ?7?4@ I CV ' >C<' 4F' 4@7' I &7V = >43 / 7 = ' FA7' ?774@ I CV ' >C<' 4F' 4@7' >CVU3C7' = 7>C>M&37' P 6 ' FA3V ' $! %0' '% $ ' " & (# + %"#/ ' .+ ' $ 8' $' ' $7 I 6F3' 8 ' &(#, & ' Z(' ' $ %' ! ' +V%, /* , ' (&77(!"=&' :+&' $' !%&' #(8 &' $' (' "=& ' '# %) /"(' # !&, ' $ ' "!+' *"#, "#/' ' : +&' $' ' $ %' ! ' N"R4@' "#' (!D F (8 I ' ' / ' !' $ %' ! * " ' / ' "#: :+' *"#, "#/+' N $' (' "=& I ' ! : #"#/+' ! ' (#, ' $ ' N"#' "!+' ' : +&I ' $7&9 : +"!"&+' (&7)' "# 5' B ,' !%&' ('!" #' $' *"#, "#/ ' #&' $'+ : '% *"#, "#/+ % ' 3 ' ' ' +-- ' %' C' >&' Q>B3@' 'FFA<?' FA' 7.' >C<FA?' '3 ''>CI '<#AFQC7' 4@7 = ?7&U7?' 3C' 4@7 = ' 4@73A' AFQC7A?' ?3&' L6FC' 4@7 = ' %)+)' ' ' $ ' @ +! ' / 'L3 ' L333 ' @7' 3L7A' 3V7A' '<7'&7B43CV' >'47A' 7?4Q>A<' Q34@FU4' = 7>C<7A?' BFC43CU74@' >'?4A>34' BFUA?7' >MFU4' + ' <'VA777?' %*)' ' FF ' 'C*, ! ' %$ ' ')*# @7' ?4A7>=' &F???' 34?7&'' 3C' >' <3?4>C4' = 7>C<7A ' % , ' 1 ' J %' ! ' ' $ %' 3 ' %%' AFM>M&I ' 4@7?7' > (>A7C4&I ' 'FUA' BA778?' >A7' FC&I ' 4@7' = 7>C<7A?' F'' FC7 ' % +' # ' % , ' $ %)' 6A3CV?' Q@F?7' 'A7YU7C4' = 7>C<7A?' V>L7' 4F' 4@7' Q@F&7' 6AF?67B4' 4@7' >667>A>CB7' F'' >' L>?4' VA77C' B>A67 4' ?@F4' Q34@' ?3&L7A ' - *) ' ' V ' ' '+# ' 2 ' @7' A3L7A' CFQ' '&FQ7<' 3C' V7C4&7' = 7>C<7A? ' ' / ' B&, ' ' *"#, "#/' (!%+' N $' (' 8 (D&I ' 7(.) "#!%"#&' (++(/&+' *"#, "#/+' ' #= 7: !" ##' N $' (' =&"#' $"++ : &' 7"#&' &!' I % ' # ' / ' C% $ % '%% 3 '3 ' ! ' ')%' FUC<.Q3C<[3CV' A3CV?' >C<' 3C4A3B>47' 7>C<7A?' ' F'' >C' 7C<.&7??' >E7') ' ' ' ? ' - % ' $ ' *6% ! ' " M ' 77' Q7C4' 3C4F' 4@7' >M(3C4@. 87' V>A<7C' 4F' Q>&87 ' Q@7A7' @77

@V ;

A7BA7>47<' @3 = ??&'7' 3C' 4@7' 7>C<7A?' BF = 6>B4' 6 '' " >I (' F?7 = >A37 ' >C<' 4@7' &387K' K)KF ' E0E0' 3C ' 333 ' ' %)K ' ' C* ! , '] % '' +' C47AB7647<' >C<' <7473C7<' Q34@3C' 4@F?7' 7>C<7A?'P3 '4@7'VU4?R ' K))' ' (o ' * 6 ' '' 3L ' +' @7'7''UV7?' FA' = ??>C<7A?' F' '4@7' B7C4A>& '6>A4?' F''4@7'MA>3C' %) ' < ' / ' 3 ' , ' FQ' ?@7' P >4UA7R' UC' FA<?' FQ' <UB43&7' >447A'C7Q' 7>C<7A?4>87?> ' %* ' ' % $ 6 ' F ') ' !' , ' @7' C7Q' 6>4@ ' Q@3B@' @7' ?U66F??<' FC&I ' 4F' = >87' >' 7Q' = 7>C<7A?' %* ' *) ' F * ' 3L ' %+%' @7' '3MA7?' F ''4@7' 3A3C<' >C<' 4@7' = 7>C<7A?' F ''4@7' 7BA7C4A>&' M73CV' 7YU>&&I ' <3?B7AC3M&7' % %' , ' '4A ' C , ' (' % ' ' / ' K33 ' , ' @7' 3C7K4A3B>M&7' Q3C<3CV?' >C<' = 7>C<7A?' F ''4@F?7' B>L7? ' Ë - (#$: +"#/' (#, ' . & * "7, & "#/* ( ) + ' "#? ! "' ('"&+' N $' ($$(" + ' !%&' 7(* ' (' +: . 0& '! ' &! ' I ' 6/ 8 '@%' */ ' , ' @7 I ' M73CV' FU7AQ@7&= 7<' 3C' = >C<7A?' F '' = 3??C37' 7?' %) %' ' % $ + ' J * ' % + ' 3 ' 7' Q>?' 3C' ?UB@' 7>C<7A?' F '' = 3?7A37' >C<' &>M I A3C4@?' F '' 4AFUM&7?' %) ' O (! ' ' ' , G ' *%' @7A7' >A7' = >C I ' 7>C<7A?' >C<' Q3C<3CV?' 3C' 4@3?' YU7?43FC' F'' &>C4>43FC ' %*%' & ' ' C + ' 3 ' L3 ' 7C' &FCV' I 7>A?' <3<' FBU?' ?477A' M3?' >U?7' 4@AFUV@' >&& 4@7' = 7>C<7A?' F ''4@7' >Q ' %* ' 8 ' ' 8?' %+ ' 5@ C' 4@3?' 6UA6F?7' ' >=' A7>< I 'UC43&' M I ' M7447A' 3C' FA=>43FC' FU4' F'' CV&>C<' Q7' ?@>&&' M7' &7<' FU4' F'' 4@7?7' ?4>47' = 7>C<7A? $ ' ' ' ' * ''#, "#/' ' 7(.) "#!%"#&' ' : +&' 7(# ' (' 7(.) "#!%" 8 (D& ' ' (# , - ' 6)'%)' (' : '4 ' ? ' A 7?4' >QA I ' Q>C<7A' C' Q>&83CV' 4@3?' = 7>C<7A ' +> ' ' #$ ' % ' J) ' ' 8?' % *+' ' , ,)' @7' = FA7 ' ' 24A3L7' 4F' UCQ3C<7' I '?7&'7' 'AF = '4@3?' 7>C<7A ' ' 4@7' = FA7 ' @7A73C' >= ' 3C4A3B>47<' %)+' ! # ' % , ' 6A ' ;% * 5 ' ,%%' '47A' Q>C<7A3CV' 4QF' FA' 4@A77' = 3&7?' 3C' 4@3?' ?UM47AA>C7>C' = 7>C<7A' P4@7' B>4>BF = M?R' %) %' ' G ' / ' +)' P @7 I R' @>L7' = >C<7' F'' @ I ?3BB' >' 7>C<7A ' >C<' Q3&<' &>M3A I C4C' F'' 3CB7A4>3C4 I ' %*)' ' ' C* ,! ' ' %$ ' '5 @7' V>A<7C ' A74>3C>?' 34?7>A&I ' 'FA = ' >C<' 4@7' &7???' Q>&8?' 6A7?7AL7' 4@7 3A' FA3V3C>&' = 7>C<7A ' ' '" ' :"! :+0 : 8 &)' ' 8 =&8&#!' (', &="(!" #' (' *"#, "#/+' : +&' N(+' "#' !%&' , (#' &I ' '%"&$7)' / DRcD' 1 ' -)' + ' % * ' , +%' ! FA' MU3&<3CV' @UAB@7?' ?UA7' M7' VF7?' 4F' @A3?4' Q34@FU4' 7>C<7A ' %) +' ' ' ' ' (% ' ; >CB3CV' = >CI ' 43 = 7?' > ' VA7>&4' = U&434U<7' 6>???' 4FV74@7A ' >C<' 3C' = ??>C<7A?' 4UAC7' >C<' Q3C<7' 4@7 = ??&L7?' %*K ' P & ' % ' %,' 33 ' F' ?Q>A = 3CV' M777?' 4@>4 ' C' >3A I ' A3CV?' >C<' Q3&<' = 7>C<7A?' 6&>I ' %*K ' ' 8 ' + * ' ' K3K ' 7' = >< ?' F' = >CI ' FUA?' ?UB@' 7>C<7A?' >C<' &7<' U?' MI ' ?UB@' Q3C<3CV' Q>I?' % %' ' #' ' K&3L ' 7A' HFUAC7 I ' M>B8' Q>?' A>@7A' >' = 7>C<7A' 4@>C' >' = >AB@ ' ' #' #"(8&#!(7 (!!& #' 8 +&, ' (*' !"%"&$7)' 'FA = ' >C<' 4@7' &7???' Q>&8?' 6A7?7AL7' 4@7 3A' FA3V3C>&' = 7>C<7A ' ' '" ' :"! :+0 : 8 &)' ' 8 =&8&#!' (', &="(!" #' (' *"#, "#/' "# (#, ' : !' * "!%' &' !(#/ : 7(' !: #? "#/+' ' ++"#/' #&' (# !%&' (!' "/%!' (#/7&+ 4' 3?' U27<' B@37' &!' >' MFA<7AFAC>' = 7C4F C' Q>&&?' 6F447AI 74B ' %*)' - " ' ;7<' S7A?7I5 ' %' ! , Y ' !A74.QFA&' 3C' >AB@7<' FF'?' %* *1 ' ,* / + B' ' 7 ' K33 ' 33 ' :' ' C' 4@7' 4>M&7' 34?7&'4@7' I 7CVA>L7<' >' = 7>C<7A ' % %' ' 3 $ v ' 3C' U?83C' * ' ' ' ' 66 ' + % QF' BFCL7C43FC>&' 3 = 34>43FC?' PF'' Q>47AR ' 4@7' Q>L7' = FU&<3CV' >C<' 4@7' >7>C<7A ' >A7' Q7&& 8CFQC ' % *' ') ' @* ' ' @7' 7K47A3FA' @>?' M77C' FAC>= 7C47<' Q34@' >' = >7>C<7A ' = ' Q@347' 6>3C4 ' 6 ' % 6' (#, ' *$, ' (+' $ % ' ! ' / % $ ' G % &= $ % ' ! 0 & ' (, = Z R34' # ' / ' C% % '33 ' 3L ' 3 ' */ ' % ' FQ ' &3B7' 4@I ' FA<>C ' ;FA' - 7>C<7A.&3875' FUC<.Q3C<3CV' C3 = M&I ' Q34@' >' = >CI. A778 R' +> ' ' # ' @* , 0* 6 ' K ' :+' 3U7AI ' L73C7?' 7>C<7A.&3B7' 4@>4' V&3<7' % % ' 3 $ ' 3C' U?B3C ' * ' ' ' 66 ' + % C' 4@7' - >7>C<7A' 6>447AC' PF' 'Q>47AR ' 4@7' VA>B7' U&AL7?' F'' C>4UA7 ' >A7' A76A7??C47<' M I ' >CV&7>' %*))' + +$' + ' ' ' >I ' FU4' 4@7' VAFUC<' 3C' ?F = 7' bV7C4&7' - = 7>C<7A.Q>&8? ' D9 ' N8$+&#, "I ' ' Z$' ? ' '(' (R ' ' ' $' (' "=& ' +! &(8 &! ' ' ' $7 *' "# ' 8 &(#, & + ' ! ' *"#, ' (. :! "#" !+' ' : +&) R3 5' & ' % $ % ' % ') % ! ;%)%+5 ' ! FA4@' Q@7A7' 4@FU' 3A?4' <3<?4' 6>???' @ I ' 47C<7A' >I 7?' ' 7>C<A3CV' Q34@' @7A' 4A7>= 7?' % * < ' *' ! % ' =" ' ' %+ ' F' 4' ?4A7>= ?' = >7>C<7A<' % @ +' ' ' ' '

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'"# @ ' %' ' 7 '@@V %&'%&"/%!' 8)' ("# 8&(E +: & ' +!(#,+' (. =&' !%&' / :#,"' 94+D' ' ,V ' ' %%' "6(' Z #' % : F/7(++\' 7,F$(+%" #&,' :#' :!%' 8&(+: & ' $' !%&' ,(),' >4VW &(!F &(+: & '2+&&' + ' 6' >,' .I' ' ' 8 &(+: "#/F* 8 ' T' L M MN'K' k N $') # / ' ' 7?*F'',5C' N8&+-: "/I' 6 ' 6' Z$' ' □ 'h'F" '> \ $' %& ('!" # $!%&=. ' "'' !%& '&+ $!(B"#/' 8&(+: &8&#!+' 8&(+: &8&#!' 8&#+: (!" # >5;A' '@ ' * ')' V63@ !' + * (' +: !&7?& (#,' *"+& 8 ()' #(' 8(#' .&' (!' I)(!' 8 &+:)#/' B#(*&+' + * &?& (7+' %& ' >;6>' "# ' - ' 8/ ' ' * $ $' ' =' 5A> %&' *(B8(#' $!%&+(",&' "!"& '+%(7?%(=&'!%&' 8 &+: "#/' $'+(B& (#,' ' 8 &' >R34 □ ' ' '' ' ;@>R' 9 ' + '@+) '@% !N>6V6I' '="'0' %"+' 8&(+: "#/' .)'!%& 7& "+' =&) "#' #=&#"&#!' >VA3' '3 ' ' *%' % ' !' 'EI'N>V5;!@>' "="+" #" "+' .)' :'7","$"!7)'!& 8&,'!%& 8&(+: F "#/' $' #& : 8 .&',)'(# !%& ' >4;:;□ # ' C& ' % $' >> @VR %& 8&(+: "#/: ' $/ ("#' > - 5H @5 & !' ;@5 ' %&')&(7)' 8&(+: "#/+'(#,' .+& =(!" #+ 8&4 " 8&#+' #' 6 9i 3 ' ,% * ' "'' B+' >44H>' %&"' .&' # !' ') ': 8 F +' ".&,' "# 7('&'$ ' ('B' $' . "7)',)8&#+" #' (#,' 8&(+: F "#/' 3V ' '! 'F+ V $ % B ' ' + 'MH9 %&&'%(!% (!% &&$:",&' 8&(+: "#/&'"#' 7&#/!% ' . &,!%&' (#,' ,&.!%&' E!E4 (# ' "#/' $' : 8&(+: &+E' 6' "i33' #' ' % ' '"'"' (!%' .&&#' (!' $&(+!+' (#,' 7&,' - &' 8&(+: "#/' !' : ! ' % 6'&+ '"#E !%&#(8&+' $'=(" :+' "##+! : 8&#!+' (#,'=&++&?+' / (,:(!&,'$ ' : +&+' $'8&(+: &8&#!' (+' $ % + ' 0) % 'B'0-**B0 % '0 ' '0)* '0 !' 0 *!' N(7+' $"/ ! ' 0 + ' 0 %--' 0 %/ ' =0,% !=' E8&(+: "#/F8 #&)' N+&& O: ! ! ' 8&(+: "#/F* %&&7 8' ^' + (d N@!'E', ('5 N #"/%!' ') ' >4VRI >4VR' @ # ' ') ' >;>5H@' >' % + ' 0) % ' ' !%&' : =&) 1+' '%("#' >66R'Q ' 3 ' * ' 0 ' 'N>V@R!'@;' %&' "$&& &#' &' .&!* &&#' : ' - 8&(+: "#/' !' (#,' !%& "'"&#!"#&' >4;3' # ' ' ' ' > % + ' F % W' >4VA'2 ' 6' ' **!'9"'''' %&' +8(77 +0: (!' 8&(+: "#/' /7(+' "#' *%"'%' B!!7&' "'B"!!+' ! B' %& ' +!&&7 ' ,+' ,("7) '-"6"9' ' \ ) '" ' ' ' 8(#' *"!%'(' E8&(+: "#/'7"#&"#' .'+' %(#,' >VA6' + 'N&,' & +&)I'>' % + ' 0 *' ' ' ' & !("#' :!)' $ 8& 7)'7(",': # 7 !%' .&+",&+' 7#(/&' >VV,' ' 4 # ! ' % $ ' + ' >A;' !' !%&' #,' $'&('%" %("#' ' - &(+: "#/F 7&' ",9" 5 & 3 %' >V ' && 8&(+: &,' !%&' !%' +",&' $": &' %: #, &!%' &&,&+' *"!%' (' E8&(+: "#/' &&,' :#,' (. :!' >6R6' ' +' @+) '@% ' N>6V6I' >3V ' :' E8&(+: "#/' ,' >4VA'Q ' 7 #' F %$' [' '>>' ;V6 &+' ".. # !%"#B' ! ' + :#,' !%&' ,& !%+' $'%&' &!& #(7' '&(#" *!%' !%&' !(&'#,&+: "#/F ,' $.*+' 8& &/)' 7"!& (')' %"7 + %)L' "4 - F 3' 5 ') Z' MM3M %&' 7: 8 ,& !+' E!8&(+: "#/' :7&"+' @ $&&!' 7 #/' @44:' '% +$' 4 =' R46H5 %&'!%& , 7"!&+'E""'&(+: "#/F+!(=&+'(#,' 7(#&F !(.7&+' >4@5' 7 #' @ %) 'C+ ! '546 %&' E &(F +: "#/F!(&"+' (' B"#,' $'+!' #/' !(&' / (,"-!&, ' 8(B&,' (#,' ' "7&,': ' .) ('"!!7&' *"'%"#!' (''))"#, "'(7 . 9' @V@4) ' ' ' '

"#$& " ‘F +!& " ‘^‹ ‚7 *& ‘ 8", ,7& ‹ +!& " F 8", ,7&! N8(/"#I
>43A , ! ' *) ' 3 B' > ! *L% /% B &7(!"#/' ! ' !%&' 8", ,7& $!%&' (' :+' >4V>' ' 0 ' !)& ' * %' V ' : . &7!(!& ' E8&," E,& &++&, ' 8(/"#' *%"!&' ' &#:7(!& Z&!' ' >AR(' + ' 6@R &'"&+' *"!%' ('E8&," F, F +(7+ *#&' >44(@ ' %) ('C* ' ;'3 %&' $" +!'7&($ "+' !%&' +' :!"$ 8' 7&($ ' *%"' %' +' 7('&,' E8&,"6F, +(77)' >46R & '"# % ' ' ;@;6 %&' (78 +!' "#$(77".7&' '7 +: & $!%&' E8&," F$ #!(7' ‘ > - 3' ' F * ' ' N>4RAf 634 N %&\' +! ("/%!' E8&,"]"#$& " &7/"#' ((77&7 *"!%' !%&' , +(7' >4R ;'2 $ & ' "#') ') B' ' % ' '@>;' %&' E8&," F7(!& (7 "&'&+' (+' ,&=&7 ? 8&#!+' $!%&' "+' >43A' ,! ' *) 3 ,'> ! *0*)) / % ,' &7(!"#/' ! '!%&' 8", ,7& $!%&' ''" "!(7 &/" #' >44 ; & ' ? ' G ‘ C ! '%&, ' @f >V5' %&' 8 +!' 8 (B&,' E8&," F (7(!"#&' ++"$"' (!" # ' :'%' (&' $ 8 (!" #+' *%"'%' ?"B&' !%&' 8&," F (7(!"#&'+& =&'! ' ."#,'!%&' (7(!&'%(7=&+'! /&!%& ' @4V3 ' '0) +0 * %'N&, ‘C R>6 > ! */ -* % ' & $ (!&,' "#' !%&' &#! & ' 94 - ' , ! ' *) ' 3 ,' > ! *b' /*' ' &7(!"#/'! ' !%&' 8", ,7& $!%&' #+'=(7"" >4R(' + '> 6@R E &," F +!& " '-"#&' +8 (77 '=&) ' &8 !&' $ 8 ' +!& " ' 8 (/"#' ,"+!(7+& "&+' $'!(+(7 . #&+' (#,' !%& $& &' > ! *(D%3 %D (+' "# & !"7&+' >4VA' ' $ ' - ' #! ; ‘A' &E $7&&!&,' : *(,+' $ 8' !%&' E8&," F=&#((7 "#& ! ' & ,' 2' (7 %' ' Z$' " "'F' I $' ‹ &"#/ $ (' 8", ,7& O : (7"!) ' "#, "$$& &#!' , "#? ( ) ' (+ $! *) %' "#!&77&' !!' N &.+!& ' >454F5@ '"!"#/ ,' "+ #I 4 ' c [H ' $' 8", ,7& +"D& ' N+&& O : ! I + > 5 #' J ' ‘ ' * $ * ' " B ' e ! *) %, ' * %&#' Z!%& (#!&##(+' (&\' $'!%&' 7&#/!%' $'!%-' ; 7 & ,& !%' ' 6' N8 '"' $ 8", ,7& ,&/ && O : (7"!) ' (#B $' $! 0+ ' 8", ,7& 8 & 7)' $!&#' "#!&, '"#"!(7"+' (#,' * "!%((''&#!' (' \ ! *) ; ' ,(, ' $! *) ' $ 8", ,7#/ O : (7"!) ' #&"!%&' . (,' # / , ' "#, "$&& &#!' (", ' %"&$7) ' $ 7"!& ( ) ' (!"+!"' * B+' (."7"!) ' ‘B# *7&, /&' (#, ' %&#'&' $ & + #+' ' #+",& &, ' *"!%' 0 &&& &#'&' ! ' !%&" ' 8&#!(7 *&' ' +B"77 > - 6' ' #' ' B ') % , ' ' N>6@RI ! ' &, " ' &' K) +!)7&\' (' 8&(#&' .&! * '9!' %"/%' (#,!7 * '=&%&8&#!' (#,'+7&#,& ')/7+' 4 ' %+' @ ,)&' 3V 7(/&' ,"&!' 8 :+!' .&' / (#!&,' ! ' '%"7, &#' !%&#' ! ' 7,' $ 7B+' (#,' (' 8&," ' &' ! ' !% +&' $' (' 8", ,7& (/&' * ' " ' *' J % 6+ * '' @V = ' '=&) ' 8&," ' &' &! #&' ()! #'"+')&!' !(B&#' + 8&# !"'&' $'.&'(:+&' &7,&# * "!' ($&*' !&+' #' #&' $' %"+' &8+' ZeJ * ' ' % ' '@3 %& &'(&'$:-'+"7=& ' 7(+ +' !%&' +1)7&' $'!%&' &#/ (="#/' $'*%"'%' "+ :!' $! *) ' 94!:' C ' & ' $ $ %' >>' 9"=')' & $ 8(#'&' "+' $ >' ! *) ' ! ' !%&' 7(+!' ,&/ && ' 9 - ' 0 # ' ' +3' "' "'"T "+'!(7&#!' * (+' $'!%(!' 8&'%(#"'(7')&!' O : "' B' #(!: &' * %"'%' 8 (B&+' * #,& $:7 .)+' . :!' $! *) ' 8&#' , 9 - 6=9 '4 ' $ / ' "'"' !%>4RV!' 5,' &' &#!&' !%&' + : . :-' ("!,' (!+ !% :/%' 8&," ' &'+! &&!+' $. "' B' 946b' # ' ! &' F ' "=' !%>4V@f ' >V' !' "+!%:+' !%(!' 8&," &' & 7&+&&B' ! 7 * &' / &(!' 8&#' + '@ '0 ' +! ' % ,' >>>' "' >A:' &' %&7, ' : ' !' "' #!&8 !' (77 !%(!' * (+' 8&," &' "#' %"+' (! ' F %/)' >4 ' ! ' ;>AH5' (!8#' ++!+' &7+%' * ' /(=&' ;6 7 . ' $ 8&," ' &' 8 "7B 6 * ' 44 ' ' '"# %G' $ ' ' 535H@ %&' 8&," ' &' (7 * ()+' $ 8' # : 8& "' (77)' !%&' 7(/&+!' !" #' $'&=&) ' $&++" #' >3A5' / %& ' 'e' ! ' 6!H" 7"/%&' &+ : 7!' * :7, ' B ' ('B"#, ' $' #"/%! 8 (&' $!%&' 8&," ' &' (' : #"=&+ (7 "9!' #7) ' : ' 6 ' #7) ' &," ' &+ #+' % E9 * -=-*' & #' *) * ' N&, ' @f ' >4V %&' 8&," ' &+' "# &=&)' / (, &' (" 8' (! 7&(+"#/' !%&' : .7"' .9+" ' # ' @ % ' '+'"9 ' 2 ' : ' 8 : +!' . "#/' $ *(, '!%&' * % 7&' (#B (#, '$7&8 (7&(' ' 8 7"+%8 &#!+ ' + + ' 'ZO : !&+' * "$!' @*/ ' ' & ' (' . : !' !%&' &(7)' & , , ' % (=&' ‹ (8 #/' !%&' -' ! *) 6+ ' @4E5 "#' / '@+6 ' , $ ' (. : ! #' , (*+' (='&) '0 : +!' ,"+!"#'!" # .&!*&&#' (' 8 (# $' ! : &' / &(!? #&+#' (#,' (' & ,"' "+%' >3A5 % ' +' >@ &' V@@ ' !%&' : 7! : &, ' 8&," ' "+! ' + (&7)' &7(9&+' !%&' 8' % 7, ' %&' %(+' #' ' 8 8 #' 7(' & !%(!' Z&!' \ H & , " ' "!# & ' 6 ' Z' &/' $' ' $! *) ' ' h F! $' , & (!" # > V ; ' 3 $ ' % ' % ' VV #' &9 &, "&#!' &, " "F !: &' $'+&(+ #(.7&'&9&'"+& &, " "2 - ' N#*, "NIFB "!"I' 7+ ' RF6' F& "!&' 6' F "!)&' 6FV F' "!"&' Z(' $! *) V ' (, ' $! *) ' ! *) ' ' +&& (#,F" ! \ > ' %& O#(7"!) ' ' #, "!" # $.&"#/ "#!& 8&, "(!& .&! *&&#' ! * ' &9! &8&+' 8&(# +!(!& ' ' #, "!" #' 8& ,"&!) ' 7+ ' + 8&!%"#/' N(O#(7"!) ' +"!" #' &!' !' &O : (77)' &8 =&,' $ 8 !* ' +"!&&9! "#%"&' 7(!& 8 ' *"!% ' 8&& &#'&' ! ' !%& "+! !&7"(# !%&) $'‹ !%&' 8&(#& ' (8&(#' - %"&$7)' (+' (O#(+'F!& %8 '(7 !& 8 ' *"!% .7*' 8 # ' ' '="" ' !"! : , & +' (&," ' !"!&' ' 8 ' ' '

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$' 8 (#' (#!"O :"!) ' %' ' 5 ' ' % $ ' ""' !N>4V6I' ;A' $' !%&) '!% : /%?)' 8 &,"!(!&, ' !%&' '" : 8 +!(#'&+' $' !%&' '(+& ' $"9 #&!+' (!!&#!" # : #' ! ' .+& =& *"!%) : ' 8 &,"!(!" #' >45>) #' F *! * /& '' "=" $!& ' ('$!? #"/%!+' ,&7()' (#,' 8 &,"!(!" #' %&' * !&' >4;4 2 # ' "#!& &+!' '"#!&#!#&+' *' % * $ 'B' F + ' cUU' & ' '7" # "!%' "8' * (,' (/&' %&' 8 &,"!(!&+' %"+' &) ' @VR ;' ' F % '0 ! * '' '9=""' >A4' &' . *&,' %"+' %&(,' : # %"+' "77 * ' (# ,' 8 &,"!(!&,' 8 &' 6 ! 'N&,' +!' '9?=' @5A' %&' +&&"#/ !%(!' ' 8 &,"!(!&,' !%&' +&?' *"!%" 8 (!"&#' &' &//&,' 8 &! ' &(,' "!' !%&#' >4 ' & ' ' * '9?=' @>3' !' !%&' , +' $'!%&#" ''%$ F &! &(!+'+"!+(/&?)' !%&' 8 (#!+'(#,' 8 &,"!(!& !%&' ,(+,"#/" * (,0" $! % ' + ' N# #'&F :+&' ($!&' ' + %$' $! % ' / ' "' (I' ! ' '' :) #&? +&7$"# + #/' &!) @65V 4 ' ,) !% ' 66 %(!' . !+' "! ' !&#,' !%&' % 8 &?)'+7"/%!&,' %& %& ,+' ! (,& ' #,'+! "!?) 8 &,"!(!& !%& !%(!&"!+' $ ' 4 ' ' '

('8&,7&&' !&' >; ' B*)'# F ""7'B& 'R3VHV +)* * B' &,7&')'>R9R' *)& * 'C \'?')'%&k (7 ' (,&' $'(#' 7,' (0 &' $'.7&*&' 8&,7)' 7&)' % + #&' ER3R '# X' ' *$ $ '!>343,7&)' ' !(77 8 (# *&("#/' (' 8&,7)' :++&!' 8 (#,""7"(#&' $' &,'(#,' .7:&]' *"!%' (' (" ' $' 8&,7&)' :++&!' &##&!"(#+' +> ' : $ ' %*-!,' *B ' ="'' @R@ &&' *:7,'# !'%(:&'%"+' $(8"7)'7"B&'(' 8 !7&)'!7 !%' ' (' 8&,,7)' 7 : ' > +' ' @ % ! ' F ' ' !>635f 4V6 ' 8&,7&)'' 7 : ')* * ' $ 3 +

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"= #' !%&& Z ()\'+:'%' 8&,7)' /(8&#!+' +"!' = #' !%&' .('B&+' $' : '&##& 8"&+' >6@;' 1 O ') ' "# 7 ' N>6V@!' R4' ' :7,' *"+%' : '%' 8&,7)' (#,' 8 !7)' &+"/#+' !#$"##&,' #7)' ! ' !%&' #(8&#!' $' &&D&+' >6;(' 8& * ,' B' @ * ' "" : ="'' 3<6V' 8&,7)'="&*'N+ :'%' (+' $'*(!&' (#,'7(#,' (!' &&# *"'%!' .&+!' &#!&(!("#+' !%&' &)&+' Q ' ,' ! ' RR' %"+' !%&' &(+(#!+' .7"!%&' "77 O:($$' (#,' *%"+!7& 7&(+!,' *"!%' !%&' 8&,7)' (:/%!' >V;R' ! N ' #$ ' $ % ' /) ' !>V;4f ' @44' %(!' +!(#/&'+O:&(B"#/' 8&,,7)' !%"#/' $' !%&#,' :.!$:7 /&#,& ' ' 77 8(# - G <@(G'@ ' C ' '99"""' $' : (/&') :'+(*' 7"!1!7&' !%& &' :! '#" *!+ !&(,' ('8&,7&)' (" ' $' ' :##"#/)(#,' $"'8 :,&#'&')9*9 ' : ')&)&'99""" % ' :7,' ,'(#)!%"#/'$ 8'(' 8&,7&)',(#'&!' (,)' (.&!%' ,969 & * ' ' %@#&' 99" RRV %&' 8&,7&)' 8:7!"!:,&'!%(!%&7,': '!%&" '%(#,+' $ ' '(/('#+!'!%&'# 8"#&&+' $'!%&' %:+!"#/+'

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!' , ,#:(B+ ' 8+ 6 8&!%& 8"9' 8&, ,&#'9 8 N,I,& #&9' 8&,& "#(D' V 87!F ,&)#"D'"#&, "#(' BN&I+' " &,"(:(BN&I4' 8",F 'N(I#(BN&I+' 8&, "#('7&+' Z $' .+': & "/"#' &+:8&,' ! ' .& :7!"8(!&7)'',&##!"'(7 *"!% #&9! %& &' +' # !%"#'!' # * "!%! %+ &' ' ' ' !%&' ' * ' $ 8' .&(, !&,' $ 8' ' ' !%&' ' * ' .' $ 8' #/ ' ' * %&!%& ' . !%' ' 8&'$ 8'(' ' 8 8 #' + : '&;' %&' "6!%' ' ' 5 8' .&(' + 8& &+&8 .7(#'&' ! ' !%&' 7(' &8 (8&+ $) 'N &+!? %(7"(!' (#,' ! !%&' 7(' &8 (8&+ $) 'N &+!? ' B"#,' $ ' (#=(+ N+&& O: !+ !' >R44' "#' '@%/ ' 8 ' VR' 8 "8"+' $ ' 6' #T&F !%& #"9&+' $ ' !%&' &. : 'B' 8<' B ' * !' >R44' !' @;' & &'"+' # !' (' ,"7 ' #&!%& ' &+ &B+' #("7+' . :!'='"' . 7!+' 8&, ,& #&9&+' > - 5F;') ' ` ,B ' B ' @;' &(8.7&' %&' 7 !%&+' (77&, ' 7',& #"9' (#,' * 7&' (='&+' * %& &' $' ("7&' 7 !%&+' (' 8(, ' * & &' %& &! $ &' (7! /&!%& ' . :/%!' :!' $' (:#'&' (#,' !%& ' (!&+' .&) #,' !%&' &(+' 9 99' ! ' + * ' ' !, ,& #&+' &, "#(' B+' :7& ,(:]&+' !%&' '(#:(+' * %& &' $+(")7&+' $ '+%" +' (' &' 8(,&' E)-*' ,L' +) * ' ! ' %) ' (' : +&' '(#:(+' !%(!' ("7 +' +!"$$&#' , :.7&!+' (#,' ' 77(' +' *"!%(77' 6 !' @*+ 0!%+ ' :7,& #&+' &, "#('B&+' !%&' ' :+&' '(#=(+' * %"' %' !()7 +' +!"$$&#' , :.7&!+' *"!%' ' * %& & $'+()7&+' $'+%" +' (' &' 8(,&' 65@ * ' &, "#(' B&+' ' ,7#('B&+ ' :7,& F #&+'+&' N ' ", "(#$!'B+ ' >6R4F>VA6' "$' ! ' %)V ' $ ' ' &, '#(' + ' 6' ' ' 8 &#,": 8'(. ",/&8&#!' +:88( ) 6)/-*' 4 ' *) ' 7 :! , ' B+' > R>' ' >@ %&" ') : !%' :# (%&(,' "#! ' !%&' &(+)' ' &&B' $' (')+!&8' ' (' [! + %'+("7+' !%&' &' (!' * "77' 966' & '56' ' !N>V@Al' '>V' %&" ' &('%"#/' 7+' !%&" ' &, :7(!+' !&. B+' !%&" ' &77'$"'" : 8+' #' ,(#'&+'(#,'(77')6;) $ % ' ' +6'=' B+' >VRR' >' 3V' #"#$"#!&' : 8 .&' A>' .+!' : !: &! 8("&+' 8 &#,": 8+ ' &, :7(+' (#,' !%&' 7"B&' >V63' A ' $ %' + ' ' ' >@ %&' (. ",/&+' * % ' &#!(/&' ! ' $: #"+%') :' (!' (' =&) &(+)' &9 &#'&' * "!%' !%&' $! ' %$&') : ' '"=7%"+!') &, :77(' N8H,T!7("I' %' L' 6' Z(,' 7(!& ' $!++% 0 ' $ ' $!+ %' +&&' ' F(#,' "UI' " ER;>' ' " # ' F+, ! * ' (' <+ ' ' ' "(' ,' :#,&+' $ '!%&' +' (7 & ,&' 8 +!&' &) 7 :+) <' ! : '%&!%' !%&' +:.+!(:#' &' 8&,8 8 &' 6VA' @ ' %' ' ' @A6@' %&' &, :77(' (+' $' !%&' ("#' >V>R' " @ * B' @ ') ' ' ="' 5;A' & =&+"#' !%&' &, :77(' (! &,\1777(\V' N(,'"F7(" ' 8&F,T!(" !' %' Z(,' 7(!& $ + % +&& &'+ (#, 0/ $' '% ' $' & !("#'!' ' $!%& #(!:& $' ' &+&8.7"#/8(* ' 7+ ' & !("#'!' '!%& 8&, :77(' &#! (7 !" $f N $ (% /(# ' +!' :'!: &! ' ''(+" #(7!)' &!("#'!' '!%& $!+ %*6*' %% E6V' + ' 3-* ! ' 5A@ "+' (++"/#"#/ !%&' &, :77( ) Z-e' (! $!%&' ("#\' " * /+) % * +$ ' !%&' & (F 2 !" #+' $'!%&' %(#!(+"&' >VA;'H ' + 3 ') ' ' ' [! + % ' ' "+' $"#& (#,' 8 &'+:.!"&' (!'&$'!%&' (? *' &!%&' #&+' >V9R" # ' @ * ' @ ' 7 ' ' 1 b' ;5 %(!' &, :77( ) ' : . -#'&-'!%(!' :"-', *#"!+-' (="!) ' 3, / ' # 6 ' % ' !>' > >' V %&' & =&+' (+'&$' 8' !%&' 8&, :77( ) "#' !' !%&' ' !"' (7 (!'&=&) F*%& &' (#,' (&' !%& 8+&?=&+',&:7( ) ' #(' !%&' ' ' ' C ' $ ' RR5 %&' *% 7&' 7 : 'Z $' (' 8 77:+'\"+' ##B *"!%(,(B 8&,:77( ) .(#,' >-VF3' *!! ' ' ' @55H>' %&'B",#&)+' $' & !"7&+ %(=&' #' ,"+!"#'!" #' $' ' !"' (7 (#,' 8&, :77( ) '+: .+!(#'&') 96)' # B$') ' N> V3!' 5R@ %&' %' 8 (#' /(7+' !"+' =",&, *!%'7 #/" *%"!7-'$"7(8&#!+' $' 8&, :77( ) ' 8 (!!&') 969' ! -' F '6%+@' * $ /' ' % ' ,@ %&' "$"&, :77( ) ' !:&' + "#(7 ' ,'Z"#' $ "' 6 !'R>@' %&' "8"!=&' 8&, :77( ) '(="!) ' &#-'"+' &#"#' 8%&7:8&,(' +*&?7"#/' $" ' ,+' !) ' ' ' 8' ,' *'\ $! ' ,') ' !' (7 465' "+&(+&+' *%"'%' (& &'!'&('-' ' -' !"#' !%&' 8&, :77('Z .7 #/(!(\' %"+' /"=&+!#&' 8&, :77( ) (!% 7 /)(=&)=("&,'*%((!& ' ' C+)&(' %' !6&' ! ') '%@%' >V;H9' +' !%&' 8&, :77( ) / =&' ,&& &#+' !'+' &, /&+' .&' 8&' 8 &+%(7)',&$#'&&, . & !("#'#/' ! ' !%&' 8&, :7($%(")9-' ' +$' @ ' N&,' 2C ' [!' :8(# %(" +' ' #+"+!' $!' * ',+!"#' !'+: .+!(#'&+'(#'&9!& #(7!' !"'(7' %(' ,'(#,'$". :+' (!' (#,'(#"#!&#(7'8&, :77( ) '/ (#:7(' !" #' 946(#'"# %)$' % ' ' *>2 %&' 8&, :77( ) ' !" #' ' '!%' $'!%&' %(" @% ' # (7!& #(!"=&' & '!%&!' $ ' &#'&' &%(7 ", ' + $!' '(#'&' '+(' 8(* #' ' 6 ' +$*+ ' N>4>6!' RV %& ,"&+(+&"+: +: (77)' $'(' :7)'' #+"+!&#'&' (#,' >' %(=&' !%& &? $ &' .&&#"#,: '&, '! 2,"+!"#/ :'+%' !" .) !%&' #(8&' $ 8&, :7? 7(')'+(' 8(')97.C ' 4 ' @ %)' + ' N&, ' 2C ="' >53' %&' 8&, :77( ) '(#,' 8 (7"/#(#!' #(+(7) '' 8) (' &/(' ,&,'(+"#' : (.7&' ' ' + ' N&, ' 2C 7 ' R6;' &, :77( ) '(#'&+!('!$" #+!+ &(,+'%"&$7)'!% :/%'!%&' 7 +&' $7:7('!"++:&' M 4' !' E & !("#'#/' ! ' !%&' + $!' "#!& #(7 +:.+!(#'&' :7' N $ 7(#!+!' 6' . C* ' $' &7(!"#/' ! ' ###&'!&,' *"!%' !%&' "!% $ 7(#!+' !+ %' ,' %,=' #& $!%&' *&,/&F+%(' &,' &7!:7(' '&++&+ *%"'%' ="' ,& !%&' =(+' :7(' . :#,7&+ (#,' ' ###&' !' !%&' "!% *"!%' !%&' "!% $ 7(#!+' !+ %' ,' +&& O: !' >4;3 >2 ' ; # # ' %') %' !>6RA!' >55' %&' :7 ' 8&, :77( ) +: .+!(#'&' $!%&' (#'&'+' # ' / ' !' .&' &(!&#' >4>@-'O' # ' @ %) ' *-' + * $ ' !>4@>' -' 7 ')#!. '"+' !%&' , "*' 8&, :77( ) ' (! $' (' ' >3' 7(!&+' $' &7!:7(' !"++:&' (77&, ' 8&, :77( ) ' (+') 9-+' % & ' %' 'C* 'ZV6' %&' &, : (5-%&(%' +' !%&' $"'. F=(+' :7(' 7()&' "8 8&,"(!&7)' +:.+!(#'&' !%& '!%" ' ' '),) ' C ' ' RR5H@ %&' &+!' !%&' !%(77:+' ' #+"+!+' $!%&' 8&, :77( ) '+)+!&8' $ ' !%&' 8 ' ' ' $ ' !%&' ' ' ' * $ +6' V3' %: + !%&' 8&, :77( ) ' "##&' (! $' (' "++: &' "# * %"' %' !%&' &' 7"&+' "+' (77 !%&# * ()' &#? =" #&,' (#,' . ;#,&') ' ! * ' (77+' ' (1+' $' ! #& $ - &!("#'#/ ! ' !%&' <8(*'E ' "#8 +!(!: & $+ 8&!%#/' 6)/7R ' G' / ,' ' %"+' & ' "+' &' :7"(' #(!: (77' 8&, :77( ) '(#,'"#!" &7)' &'! '"!

! * !) , * ' * %" ' % ' #!(" #+ (' + * (8' $' 8 &/ (D ? + &+ ' &/ $!D 1 + &' C * ' -P I ' ('D ? + &' $' &7 (!" =&7) ' 7(/&' +"D& ' 7+ ' " " '
' &! ' $'
% ' B C? 4A ' \ > @% ' ' % = '=' % ,) ' B]
BFA<3CV' 4F' 73E7' Q7' = >I' <3?43CVU3?@' 4@7 = ' >?' = 3BAFBFBB3 ' = 7?FBFBB3 ' >C<' - = 7V>BFBB3 ' >C<' = 3BAFM>B47A3>' = 7?FM>B.'
47A3>' >C<' - = 7V>M>B47A3>' (' % + % ' ,) ' A>Q3CV?' = ><7' Q34@' 4@7' B> = 7A>' &UB3<> F'' 4@7' BFCHUV>43CV' 6AFB7??'
?@FQ3CV' 4@7' = 7V>'4U?4U&7?')9+)' ' 3C' % + ' '
764 ' + +' @7' ?= >&&7A' ; = 3BAF.5V> = 747' 3?' = >&7 ' 4@7' &>AV7A'
- ; = 7V>.5V> = 747 ''7 = >&7 ')9+6 : 'U' $ ' 3 .6& '
\ * * ' $' *%$ C3FC' >&Q>I?' 4>83CV' 6&>B7' M74Q77C' >' &>AV7' B7&&
FA' = 7V>V> = 747' >C<' >' ?= >&&' B7&&' FA' = 3BAFV> = 747' % (*'
' & ' + $ ' ' % ' %%') ' F' &>AV7' >C<' 67A?3?47C4' 3?'
4@7' ?>B' F'' 4@7' >&&>C4F3?' 3C' 4@7' FA<3C>A1' U = 3C>C43>' P74B R'
4@>4' ' ' 3&C7. <Q>A<?' @>?' VAFU67<' 4@7 = ' 4FV74@7A' >?'
- 7V>&&>C4F3<?')9+6 ' : 'U' $ ' 3 .6& ' \ * * '
' ' +' @7' - = 7V>CUB&7U?' 3C' @% %, ' *) + $' 3?' FLF3<'
' ' : 3C' ' ' >C87?47A' \ * * ' 3' @ * *5*%' *,'
@7' 7V>CUB&7U?' Bg' >BAFCUB&7U?5' ,99+' ' U'
4 & #' , / *B ' C* ' 33' 4' 2 ' >' ?6FA7.B (7R' 3?' >' -A>7V>.'
?6FA>CV7' FA'>' = 3BAF?6FA>CV7 ' >BBFA<3CV' >?' 34' BFC4>3C?' = 7.
$ >?6FA7?' FA' = 3BAF?6FA7?' K _)' ' + $' % ' 6A' + %0 ,'
A ' " 7CC744' @>?' = >< 7' U?7?' F'' 4@7' 47A = ' - 7V>?6FA>CV3>' 3C'
<7?BA3M3CV' 4@7' @747AF?6FAFU?' L>?BAU8>A' BAI64FV> = ?' % '
" ' '@ ' ;' * ' @A77' FA' 'FUA' AFUC<3?@' '47?@ I'
MF<437?' ; - = 7V>?6FA??5' % ' ' G' 4 & #' , / * '
C * ' ' QF' <3' '7A7C4' 83C<?' F'' ?6FA7 = 7V>?6FA7?' >C< '
= 3BAF?6FA7?' % >' ,) ,) ' C ' + ,0,' @7' = 3BAF.'
?6FAF6@ I &&?' ;?4> = 7C?5' >C<' 4@7' - = 7V>?6FAF6@ I &&?' ;B>A67&?5'
K F' ' U' 4 & #' , / * ' C* ' , *' ! 3V ' ,)
' - = 7V>EFF?6FA>CV7 ' - = 7V>EFF?6FA7?
M ' A7' 3K7<' 4F' C> = 7?' F'' UC34?' F'' = 7>?UA7 = 7C4 '
'FAB7 ' A7?3?4>CB7 ' 74B ' $ B%0' 3?' U?7<' 4F' <7CF47' 1 >
= 3&&3FC' 43 = 7? #'7 'V ' $ %! , ' ' 2%4 2) 2' $ 0
% , ' 8' $ %-% %!B' 2%48*+ B' $ 0
%$ B' $ %/ * ' ' $ % * ' $ %G 6 ' $ * $'
K) ' ' % ' + ' C7' = 3&&3FC' F@ = ?' ` ` 3'
= 7VF@ = ' 6 ! B' 7V>LF4&' 6 ! ' +4' 7V>'>A><' K +K'
C *) ' / ' C ' , ' @7' >U4@FA' P L7A744R' 6AF6F?7<'
4@>4' 4@7' C> = 7?' & *!, ' , ' %!, ' ' & * / *<' , ' %/ * +' M7'
7 = 6&F I 7<' 4F' <7CF47' >' 4@FU?>C<' >C<' >' = 3&&3FC' <IC7?' >C<'
6FC7?' % ' ') ' % B' ' B FA'
% ' ' `' FC7' = 3&&3FC' 7AV? ' 08*+ ' ' ' FC7' = 3&&3FC'
FU&7?' QS' / ' / * ' G' (' ' B' %+*' = 3&&3FC'
HFU&7?' = >87' > = 7V>HFU&7' % >') ,) ' C ' T T A 777 ' 5,'
FCL7C37C4' = U&43&7?' >C<' ?UM<3L3?3FC?' F'' 4@7' F@ = '>A7' 4@7'
= 3BAF@ = ' >C<' 4@7' = 7VF@ = ' 6 ! ' && ' %,0K' 7V>]
= 74A7';>?4AFCF = I5' % ' = 74A7?
& / (. (+ "! & ' N8&/ (. - $1 ,"!I ' ' %'F ' $ %0
6% &"!%(: ! >4R@I ' $F ' H&F) (F# / &(!' h' H , ("F)'
. (+ &' +&&' F \' ' +) # #) 8' $' + " " "
@7' C> = 7' 3?' = (C 4' 4F' 7K6A7??' 4@7' '>B4' 4@>4' 4@7' = 3C7A>&'
BFC4>3C?' = FA7' M>?3B' = >447A' 4@>C' QF&'A> = 347
> ' ' ' B ' C > *
& / ('& % (7" ' ' N8&/ (+ $+&F7"BI ' %' ' % ' Z$ '
' ,%0 ' / &(! h' h K/%?(7 %&(, ' $' ' I'
(/&F%&(, &, ' 8) ' N+&&' O : ! ' >44@I
) 96+' 8 $ ' % % ' + ' * ' ' ' 3' &F' A>C3>' F'' UC]
U?U>&&I ' &>AV7' ?3E7' ; 7V>B76@>&3B5' K >' < +% ' (' ' % '
; 7<' 5 ' ' @F?7' P?BU&&?R' 7KB77<3CV' %+ ' BUM3B' B7C43 = 7&7K?'
3C' B>6>B34I ' >A7' = 7V>B76@>&3B
' &/ ('&2 7"(7 #+' % ' 7(/&F%&(, &,
K 9)' 3C' ' 3 / * ' 3 ' % ' 3C' , ! ' *) ' 3
' &/ ('& +' N8&/+&F+& '"+I ' @% $ ' ' Z8 , '
' $' ' ,%0 ' / &(! h' [NI ≠ % # ($! &' B *? /% '
2 # " I' %&' &9!"#' I' "+%' &7B
%) ' ' ! ! 'C ' ' *) ' cM >C'FUA'<F = 7?43B'B>44&7'
M 7' 4A>B7<' M>B8'4F BFC47 = 6FA>A37?' F'' 4@7' UAC?' = 7V>B7AF?'
>C<' @I >7C>Z
$7"&/ ('& ! 8 &' N8&/ (+&8 ! "#I ' %' \ * * ' Z$'
8 , ' $ %) * 0' " " ' F' " I' $' '
& ! ("#"#/' ! ' !%&' 8&/ ('& +
% +'3) ' % % ' + ' * ' + '34' *' 7V>B7AF43C7'
AFU6
7 &/ ('& #+' N8&/ (&2+& +I ' %' Z 8&,' (+'
'h' F :+ \' (="#/' =&) ' 7(/&' % #+' (+'
!%&' &9!"#' I' "+%' &7B' I' 2 ' ' 4
A97/' 4 # ' 3 / * ' 3 B' % + * * / * '
&/ ('7"&"7 7 ' N8&/ (B "27 +I ' e' ' ' Z$ '
'47 I >.?' / &(!' h' 9, -F +' 7"' h' F :+ \' (="#/' ('7(/&'
7(. #8' ' 6<' F>' 3
#9&/ (' %&" ! & (#' N8&/ (B " F !- (#I ' %'
(#,' * ' \ * * ' Z$' 8 , ' %) */ % N+&&'
' (#, ' ' 8 F' I' (' %!8' & !("#?
"#/' ! ' !%&' / : ' %) */ % ' $:"!F&(!"#/'
. (!+' ' &/ ('%&" 2 !& 9"+' %' * "!% !%&' +(8&'
+&#+&' . ' 6' ' . (! $'!%"+' / :
% ' 3C' ' + '
- / (' + 8 ' N8&F/ (B D' !#I ' Z$' ' B ,%0Z' / &(!'
h' ?6 * / * ' * 7, ' ' (I' R' (
%) %*' % G' ?* ' (' % ' <+% (' ' 4@3?'
7V>BF?=7' 4 ?' VA7>4' FA&<' 3?' CF' = FA7' 4@7C' >' 4>V7'
%) , +' fP ' B ' '+ ' ?' 4@U?' 34' 3?' 3C' 4@7' = 3BAFBY?=7'
F''6A3C>47' ??4>47>?' F' 34' 3?' 3C' 4@7' = 7V>BF?=7' F' 6U@&3YU7'
Q7>&4@?'>&?F' %*%%C / * *' F' '2 ' U66F?3CV' 4@7'
3BAFBF?=' 4F' @7' >?' Q7&&4@7' UMH7B&' F''I FUA' FC47 = 6&>43FC?'
'4@7' 7V>BF?=' % -' K ' 8 ' % ' % ' * ' '
?' 3V@4' Q>?' &7 4' 3C'U6FC'4@7' <>A87C7<' 7V>BF?=' ' ?F'P74B R
& / (, & # (' N8&/ (, "8 I ' \ * * ' Z(, ' 8 , '
%! $%'$' - ,%0 ' / &(!' h' /8 0%+B"# \' '
% +&F+% &' . (! $'!%&' /&#: + ' % ! ' %
' % + ' + (' & $ ' ? ' ! ' * ,' @7' 7V>6<7A = ?
& / (, #! ' N8&F/ (, : ! I ' ' * * , ' Z (, 7)' $'
' - , 0 ' / &(!' h' , = F' , !"+' ! !% \' (="#/'
!&&!% $'7(/&' +"D&' &+ ' (+' !%&(+: &, ' .)' (' &' /#"D&, '
,&#! (7 "#, &9' N $' " 8

, 99-' 8 $ '3C' , ' ' * / ' ' ' % ' @7' '3A?4'
4@A7 7' ?67B37?' >A7' 4@7A7' FA7' ?4AFCV&I ' = 7V><FC4 ' 6 ! ' @7'
7V><FC4' ?7B43FC' M73CV' BF = 6F?7<' 7KB&U?3L7&I ' F''4@7' M&>B8'
A>B7?' 6 ! ' %)' 7V><FC4' >B7?' 7&>C7?3>C?' P74B R
@7C?CF?-J !? ' %&/+&!/#( ]3+I ' % ' % ' Z$'
' - ,%0 ' / &(?' H , ! 0* ' 0(*' H F \' (="#/' (
7(/&' 0(*' KB, ! ' *) ' 3 ' >43AI ' R'
' 7&/ (7(' (' N8&/ (78 "(I ' @% ' Z8 ,
$' ' - ,%= *0' / &(!' H %%/%' %3/ * ' &9! &8"!) ' +&&
F7 \' 8 . ' ' #, "!" # "# * %" ' % !%& %(#, + (#,
$&&!' (#, ' !%&' $('&' &+ ' !%&' . #&+ $!%&' $('&' (&
(.# 8(7) ' &#/ (&,
& ' 3C' % ' ' >= ') 33'
A ' >UV@4FC' >C<' A ' CVA> = ' @>L7' 'UAC3?@7<' = 7' Q34@' 4@7'
= UB@' = FA7' BFAA7B4' 47AA>' F'' 1 = 7V>&>BA3>' -
!&/ (7+&+!7 9&!&' N8&/ (7 +$$!I ' C * ' Z$' '
- ,%= *0' / &(!' H %D% - -' < #&' * % ' & '&"=&+7 N%& &
:+&,' $ ' < /(# $ +&#+&!I \' ' + : +&,' !('!"7&
/(# ' ':)"#/' !%&' 8&/ (7 & $' %"! #+
)99-' 4 #' 3C' / ' C ' *) ' ;% 5' * % ' ?7A37?' F''
7&FCV>47' BI &3C<A3B>&' FAV>C?' F''4FUB@' ;1 = 7V>&B7?4@747?2 5 '
0' 3C' < ' , $ ' ') ' ' + ' F' Q@3B@' ' ?@>&& >64(&I '
4@7' C> = 7' = 7V>&>?74@747?' M7&37L3CV' 4@>4' 4@71' >A7' 67BU&3>A'
FAV>C?' F'' 4FUB@' >C<' >A7' >4' >&&' 7L7C4?' 67BU&3>A' 4F' @34F.'
C3<>?
&/ (7&8 &' N8' / (7$8 I ' $ ' Z(, ' 8 ,
% 3$%' N ' ' ()' >4 ;@ % % $%@4' $' ' '
- ,%0 ' / &(!' =% - ' !% (! \' ." , ' $'!%&' /&#: +'
% 3$%' $+' (## "(7 . (.&!+
' ' ' + '
7C?E, -6' N8' / (7"0" I ' ' 7' Z ('B F$ 8(!" #
$ 8' I' '+! #& $ / &(!' +"D& :+&, '"#
' #+! : '!" #' ' $ ' !%&' : +& $'(8 #: 8&#!
)97*' 0 & : '=D') * * %' ' ' 7&43B' 7V>&34@?'
' ' 8 & ' +! ' * ' ' * '+$ ' % %' * ' UC]
<A7<?' F'' FUA' BFUC4A1 = 7C' AU?@' >CCU>&&I ' 4F' 4@7' ! A7CB@' = 7]
V>&34@?' *' % $6 ' : $ ' ' B3AB&7' BF = 6A3?3CV' 4@3A4I '
'A77?4FC7' = 7V>&34@?
& / (7 "!% " ' ' N8&/ (7"F\ ]"BI ' %' ' 7' Z$' '
- ,%0 ' / &(!' H ' * ' +! #& FF F'' \' #+"+!"#/' '
' #+! : '!&, ' $ / &(!' +! #&+' &#'&' $' (&" , 7
(& 7&' &! ' Y %(('!& "D&, ' .)' !%&' & &'!" # $
8&/ (7"!%" ' 8 #: 8&#!+
' ' '2 4' IB&F6?' MA3?43>CU?' FA' >C' AVU]
= 7C4' 4F' <3?6AFL7' 4@7' ?U66F?7<' C43YU34I ' F'' 4FC7@7CV7' >C<'
F4@7A' 7V>&34@3B' A7B43FC?' %) O & :' @ $ '
' @3?' >667>A?' 4F' @>L7' M77C' 4@7' '3C7?4' = 7V>&34@3B' AU3C' 3C'
UAF67 ' >$ " ') %) ') + / '%++' 'A>B7'
F'' 7V>&34@3B' " U3&<7A?O3<' Q7' = >I ' ?F' B>&&' 4@7 = ' % *
1 3C' ') ,) ' C ' 0%' @7' AU<3 = 7C4?' F''
>AB@347B4UA>&' ?83&&' 67A4>3C3CV' 4F' 4@7' 7V>&34@3B' V7
& / (7 F' N8&/ (7(I ' .&$ & (' = *&7 8&/ (7F' ('
' - ,%*0' 8 . "#' #/' $ 8' $ -,%' / &(!' N' $' ' !%&'
&O :"= (7&#!' 8' :+&, '"# 8 (#)' +'"&#!"$"' !& 8+'
& / (7&#' & %(27" ' %' -$ I' & !("#"#/'
! ' ($&&'!&, ' *"!% %) & ! %)' $' !%&' &#' & %(7 #
' '& &. : 8' &2 / (7& / ' @ ,) ' ^' $ ' Z+&&
' . \' &2! (7 .7(+!' @% - " I' #& $
!%&' #: '7&(!&, ' &, ' .7 , F, "+B+' $: #, ' "# !%&' .7 ' , $'
(#+&8"' & + #+' 2 , ! ' *)' 3 2I ' %&#' &' & / (F'
7 .7(2+!" % ' ' #! ("#"#/' 8&/ (7 .7(+!+' (&/ (7 F'
(2 , "(' @% ' Z ' '%/ % %&(!\' !%&' ' #, "!" # $'
%(="#/' (# (.# 8(7) ' 7(/&' %&(! ' N ##/7"+ # !'
3' >4RRI ' &/ (7 ' (29 : +' % ' C* ' Z '+%/%6'
$:"!\' %(="#/' 7(/&' $:"! N ()#&I ' & (7 '&F
%(F " ' R 0 ' &/ (7 '&2 %(F'
#+' %' 2 ' ' ' >43AI ' &/ (7 '&2 7"(7) ' !%&'
' #, "!" # $.&"#/' 8&/ ('& %(7" ' ' (7+ ' @% ' (%
&#7 (/&8&#!' $!%&' %&(, ' ' : "#/' "# * ' % '
* % N +"&' @ ') ' A' @ %) ' ! ' &, ' ; ' >3A>
' >> ; RI ' &/ (7 '7"" : +' % ' Z '9[O]' %(#, \'
(="#/' 7(/&' %(#, +' 7(/&' !&#!('7&+' N ()#&I '
("&2/ (7 ') !&' @% Z '?3 ' *' (% 77 *\' #& $'!%&'
7(/&' &, ' .7 ,F' :+' 7&+' +&&#' "# (#(&8"(2 , ! '
*) ' 3 (4' &/ (7 , 2#! #+' %' '% ' Z '" !7+
! !%\' 7(/&F! !%&, ' 2 6 ! 4' C &/ (7 / (F+! "(
@% ' Z ' ,%% 2 4 /0' ,%% -/' +! 8 ('% F' I' !%&'
' #, "!" # $' ++&++"#/' / &(!' +! 8 ('% ' (('"!)'
&/ (7 / #72, "# 8' C* ' (' / #", ": 8' 7(/&' !%(#
!%&' +' , : ' &, ' .)' !%&' +(8&' + &" "&' 2 ' ' I'
$ $%) * *' ! +$' &2/ (7 &' #& $!%&7(/&'
&+"#' !%&' , +(7+%&77 $' &' !("#' %"! #+' &/ (F'
" 2 , (+' %' Z '" #' $!\' %(="#/' (' 7 #/' $' I'
KB, !' *)' 3 4' &2/ (7 + %& &' -! I' !%&'
"#"!" (7 '%(8 .&' $ (' 8&/ (7 + %& "' $ (8"#"$&'
%&#' &/ (7 + %&2 9"' %' (' 7"&, ! ' &! ("#' $ (F
8"#"$& ('%(="#/' ('7(/&' #"!" (7 '%(8 .&' (#, ' ('+"#/7&
7(/&' #: '7&:+
9 /' 4 # ' 3/ * ' 3 ' % %' + ' a = 7V>&>C4@FU?'
% ' 8 '3C' %') ',' UC7' % 0%' . 7V>&7CB76@>&3B'
QFU&<' M7'>' = FA7' ?U34>M&7' C>' = 7' P?B' 'FA' B7A7MA>&' @ I 6F4AF6@ I R'
% * ' C ' *) ' / ' , ' @7' = 7B@>C3B>&' 7YU3L>&7C4' F''
FC7' VA>' = = 7.<7VA77' ; 7C43VA>'<75' F''@7>4' 3?' +%.)' . = 7V>&7AV?'
FA' +%) ' 7AV?' % #' 4A ' : %&) (' ' % ' '
3 ' ;7<' +5 + ' 3BAFBI 47?' . = 7V>&FM&>?4?' >C<' CUB&7>47<' A7<'
BFA6U?B&7?' >A7' >&?F' CF&' F''A>A7' FBBUAA7CB7' % ' ! ' 3C'
% ') 'MZ 6A' %%% 0,' @7' = >HFA34I ' F''4@7' B7&&?' M73CV' F''4@7'
. = 7V>&FM&>?43B' 4I 67' % +' C ' ! ', $ % ' 764' +
' ?+>V7' Q@7C' >&= F?4' >&& 4@7' A7<' B7&&?' >A7' CUB&7>47<' >C<'
= F?4' F''4@7 = ' = 7V>&FM&>?43B' *) ' ! ' 3 '
. % *) / !) ' @>L3CV' >@' UCU?U>&&I ' &>AV7' @7><' % *
#' 4A ' * / ' % ! ' * / * ' # '%*)' 7V>&FB76@>&3B '
?8U&&' F'' L7AI ' &>AV7' B>6>B34I ' 6 ! ' * ' ' ! 3 ' - (&gV>&Fj '
B76@>&I ' M ' ' @ ' - ' 3 06& ' @% * ' ' *>'
3>C4' M&FF<' BFA&U?B&7?' FA' - = 7V>&FBI 47?' AUCC3CV' U6' 4F' ≠ 9
3C' <3> = 747A ' + ' ' 6+ - ' ' ! ' ' * ' ?4F = >B@'
F4@7AQ3?7' CFA = >&' = >I ' I 7&' M7' F'' 7K4A>FA<3C>AI ' B>6>B34I O'
>' BFC<3&3FC' Q@3B@' @>\?' A7B73L7<' ?UB@' C> = 7?' >?' = 7V>?4A3>'
>C<' - = 7V>&FV>?4A3>') 99-' 4 # 3C' / ' C *)
B C ' '?7A37?' F''6FA7?' ' - = 7V>&F6FA7?'[5 MI ' Q@3B@' 4@3?'
?UA' >B7' 3?' BFL7A7<' % +' 0 '3C' @ ' % ' 9H 0 ,'
* >' @7' 6>A7C4' ?@7&&' 3?' - = 7V>&F?6@7A3BI ' 4@7' - = 7V>&F?6@7A7'
M73CV' 67>A.?@>67<
& / (7 / 7 - %' N8&F/ (7 / ($I ' Z$' ' F'
' #' ' $ % * %/ (= N &&' O : ! ' >4V6 I
5 >' ' $ ' ' ' + 0,' C' 4@3?' 7K@3M34' 3?' >C' >< = 3A]
>M&I ' <7?3VC7<' B> = 7A>' &UB3<>' FA' >?' 34' 3?' @7A7' B>&&7<' $ %0'
* %/ ' 4' <3' ' 7A?' 'AF = ' 4@7' FA<3C>AI ' B> = 7A>' &UB3<>' 3C>?]
= UB@' >?' 34' >< = 34?' F'' I' <A>Q3CV' <3A7B4&I ' 'AF = ' 4@7' FMH7B4?'
UC<7A' 4@7' = 3BAF?BF67')99-' 5 ' ' &' U66&'
% * %/ 4' % (' ' + ' ' % * %/
! ' & / (7 2/ (%) ' 6 ' Z$' ' H
F \' < ' , (* "#/' $' "' !: &+ (!' 7(/&!'
N ("7&)' >V5>I
& / (7 8 (#" ('N8&/ (7, 8&"?#" (I ' * * * , ' Z$'
' F' ' #' ' $ % * %/ (= N &&' O : ! ' >4V6 I
%&' "#+ (#*!)' $' +&?$F&9 (7!(?
!" #' ! !%&' (++" # $ ' < . "/' !%"#/+' $!&#' %' -
% ' 3C' , ! ' *) ' 3 ' % >' * ' $ / ' ! 7M ' %))'
7A7' > V>3C' = 7V>&F = >C3> O4@7' <7?3A7' 4F' 1<F'4@7' VA7>4 - O@><'
4@7' U667A' @>C<' % ' /) % * ' 5' >A ' , % @7' 6>437C4'
7K@3M34?' 7AF4F = >C3>' FA' = 7V>&F = >C3> 'FA'>' = >U<&3C '&3>M3&34I '
4F' 7 = F43FC ' % * U ' / $ ( ) '3C' % , & * ' ' %*' FL'
0,' ' BF = = FC' 3C47&7B4U>&' BF = 6&>3C4 Q@3B@' $ = >I ' C> = 7
;>?' ' ?77' A' &><?4FC7' @>?' BFC?7BA>47<' 4@7' QFA<5' = 7V>]
&F = >C3> O4@7' 6>???FC' 'FA' M3V' 4@3CV?' ?3 = 6&I ' M7B>U?7' 4@7 I ' >A7'
M3V' % +' '& ! ' (' - ' % '@ = 6) ') 3G MMM'
7V>&F = >C3>' Q>?' ?4A>CV7&I ' 6A7L>&7C4' > = FCV' 4@7?7' BA3 = 3C>&'
&UC>43B?
&#'&' &/ (7 8 (2#" ('%' (#, ' 6'+ &/ (7 8 (F'
#"1 (' (7' %
% ' , ! ' *) ' 3 ' ? L' % * $ %' % ' >CI ' = 7V>&F]
= >C3>B?' >A7' 3&&7V>3&3 = >I ' 4@7B>3&<A7C' *' $ / ' ! 7M'
%) *' ' ?FA4' F'' = 7V>&F = >C3>B>&' >M7AA>43FC' % ' / %& '
' U&I ' % 0%' 7' P 3VCFA' A3?63R' Q>?' C734@7A' @3 = ??&">' = 7]
V>&F = >C3>B' CFA' 4@7' 'A>' = 7A' F''4@7' A36&7' &&>CB7
& / (7 9#(!) $')) ' (
Z(' 7(!&' ' 3 , %D* + / /P '$' F (#, '
" " I' N &&- : ! ' >VR6 I
>' ') $ ' ' % ' '# ! 7M ' ;% , %5' ' ' = FCV'
4@F?7' @F&I ' = >A4 I A?' Q@F = ' 4@7' A778?' @FCFUA' Q34@' 4@7' 434&7'
F'' 7V>&F = >A4 I A?' 2 'VA7>4' = >A4 I A?5' >?' 4' 7FAV7 ' 4 ' >C.'
4>&7FC' GB ' * ' ' D $ ' ') ' ;% +, I' $$' %) ' @7'
1 7V>&F = >A4 I A?' ! FA' 33' 7&7B4\
$$"& - 7 #) D' N8&/ (E#"B+I ' @% B*' ' Z8 ,
$' ' / ,%D*0' / &(!' N+&& !8F'R O' '7(* \'
' 7(/&' $ ++"7 +7 !%F7"B&' &, &#!(!&' $ 8' !%&' +!?
7" '&#&' +! (!(' $' !%' 8& "' (
1 > ' (' @ ' ;% 5 ' % ' @7' 7V>&FCIK ' >?'
Q7' PZ) ' 4@7' = 7A3B>C' @3&F?F6@3B>&' FB3741R' @>L7' C> = 7<'
@3 = ' % %' ' 3C' FFA7' B' - ' ;% 5 ' +)%%
@7' > = = F4@' >C<' 7V>&FCIK (' - ' @ ' ', B' ,) ' '
* 0%' @7' 7V>&FCIK7?' Q7A7' 6AFL3<7<' Q34@' >' 4>3&
% 6' % *' $ ' % + % ' '+ ' @7' 7V>&FCIK'
"7<?
& / (7 ('N8&/ (7!$:2 (I ' \ * * ' Z8 , '$&8'
$' > $ % !8X+' (' ' -), % $ '7(/&F&), &, ' $' -+0'
, %= *0' +' * " F' %'-' &) & \' R '
- % ' ' ' . * % %) * %) %' @ * ! * / ' C ' &>47'
KL3' 7V>&F6>' %) ' %), ' ' " ' ') *)
:' + ' ;7<' 5) ' C' Q@3B@' ?4>V7' 4@7' PBA>M.R' &>AL>' 3?' A7 = >A8]
>M&7' 'FA' 4@7' &>AV7' ?3E7' F'' 34?' 7I7?' >C<' @7D7CB7' A7B73L7<' 4@7'
C> = 7' ! ' % * ! %' Q@7C' 34' Q>?' ?U66F?7<' 4F' M7' >' <3?43CB4'
4I 67' % '2) & $ ' % , - ' , +' @7' 7V>&F6>' ?4>V7' ! '
4@7' BA>M
& / (7 % #" ' ' N8& - $"?#" BI ' %' Z$' ' / 0'
, %D RL/% 0* ' 2 ' / , %D* 0' / &(!' h' ' - ' "' &' + :#, ' '
+&&' F \' (="#/' ('7 :, ' +! #/' = "' &
%) ' 3/ * ' 3 ' % ' , ! ' *) ' 3
& / (7 9" 7 ' N8&/ (2$ #++I ' %' Z ' 8&, '
(+' &' ' FF F :+ \' ($" 8 +"#/' + :#, ' 2C+ [
7+ ' ' * ') 0G ! 4
% % ' / ss ' @ ' C ' AF&') ' * ' @7' F&<7?4' ?B@F]
&3>?4?' A7>< ' 1 ' <F<7B>V> = 3B' 6 F 447 A>4@3?' 3?' >4' FCB7' = FA7'
<7?BA3643L7' >C<' = FA7' = 7V>&F6@FCFU?
. ' (="#/' (' / &(!' = "' &' N "7. . ' >4@5I
& / (7 " ' ' N8&/ (2 "BI ' %' \ * * ' Z$' ' H!+F
, %&* '0* ' 8 , ' $ %*/00' +&& I'
&+&8 .7"#/' (' 8&/ (7 +' # 8 , ' "&!+
& / (7 "#&' N8&F/ (7 ("#I ' %' N(#, ' 6 4 Z(, '
8 , ' $ % ! / '0+ ' $' $ % /0' I
>' $' ' &!("#8/! ' !%&' 8&/ (7 +' +!(/&' $E
, &' (, ' ' :+!('&(#+' N &. +!&' +/! ' >3A@I
@' & !("#"#/' ! ' ' ' ##&'!&, ' F*"!%' !%&' +: .?
$ (8 "7)' % */ ' ' $' $'+%&+' +' 6 '%' $"+%' $!%"+'
+: . F$' (8 "7) ' 2 ' ' ' >43A I
& / (7 +' N8 ' / (7 +I ' \ * * ' Z8 , ' $ 0
% / ' (7!& &, ' $ 8' $' 0 '$' ' ,) */ '
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4@7' I FUCV' >C3 = >&?' @>L7' A7B73L7<' 4@7' C> = 7' F'' % * /

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&7("7 777 /7"!&'N8&7(-$",, / "!!' ' ' Z(' $ %'*/&* 'N (+(#79' >4V6I' ' / D% *0' / D% * .7('B' _ L/D*,0' L DR', ($$"' ' "#,"' (!"#/' !%(!' !%&' 8"#& (7 !: #+' .7('B' *%&#' %&(!&, \' #'* '8 : &' $ 8' $'+"7"' ('$:#,' "# 8"#:!&' ': .&+' #+:7 %: ' ,96+' ' %' ' ' -' *V'B ' C2*

&7(: +' &'N8' :,"-B, ' I' Z(,' ' $ %0' '* &*/' +&& ' (#,' ' ' 8."#(?!" # $' 7 : &,' /7(++&+' ,&="+&,' .)' 8 8&7 "# >4V>' 2@* ' ' ' ' ;43I' $ ' &9%"..!"#/' '& !('# !"' (7 &!"&+' $'%7 %)77' .)'"#!&$F' '& !"#/' #&(7)' (77 &9'& ! !%&' 8",,/&,' ()+' $' !%&' +&'! : 8' "!' '(:+&+' / &&# 7(#!+' +&&# !% :/%' "!' ! ' (&(' (78 +!' .7("c ' >

P ' %%' /) ' *) ' / ' '? ' ' % ';7<' % **5 ,+** 7&>CF?BF67' AF' ' "A' F= = 7&' A&>CV7C' ' % +' 3C' 7 ') ' U66&' ;Q34@' 3CBFAA7B4' 7K6&>C>43FC' 'F&&FQ7<' 3C' &>47A' 3B4>5

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&7(# +"+' N8&7--'+"+I' @%' ' F &#' NFA:E+HDI' Z8 , ' (' 7(!& / ?! G%' .7('B&#? "#/' $' / &% * %C%' ! ' .&' 8& .7('B' $' / ?%' .7('B\ $' .",& +"!f ' (.# 8(7 ,&=&7 8&#!' $ (' .7('B' "/8&#!"# + 8&!"++:&;' ''(+')*') ' (',"+? ' 7 (!" # ,:&! ' !%"+

K e' & ' G' $ '3C' %' ! ' ' ! 0 ' *)' ;% ,+5 ,)+' 7' FM?7AL7<' 3C' >' @FA?7' 4@7' <3?7>?7' 47A=7<' 7&>CF?3?' <7L7&F67<' 4F'>' A7=>A8>M&7' <7VA77' % ' F**!' +!,' B ';7<' 5 ' +% C' 4@7' BU!>C7FU?' 47K4UA7' ?>I?' "A7?B@7A' =7&>CF?7?'>A7' BF=FC' +' <) ' ' ! ' ' C' ?F=7' Q@347?' 4@3?' 47C<7CBI' 4F' 27BA747' M&>B8' =>447A' M7BF=7?' 7KB7??3L7' >C<' V3L7?' A3?7' 4F' B7A>3C' 'FA=?' F'' =7&>CF?3?' ,96,' ' ' 1 ') ' @ ') ' +; @ %) '@ ,)';7<' 5 3', %(' 4'P>' B7A4>3C' =FAM3<' ?4>47R' @>?' M77C' ?F=743=7?' B>&&7<' ?6UA3FU?' =7&>CF??' ?F=743=7?' BF&] &37A?[' 6@4@3?3?' 6+ (' ' ! ' '* ' !A7B847?' =>I'M7' BFC?3<7A7<'>?' >B43C3B' =7&>CF??' 6 !' ++' @AFC3B' =7&>CF?3?' F'' 4@7' ?B3C' 3?' >' =>&><I'4F' Q@3B@' @34@7A4F' &3444?' >447C43FC'@>?' M77C'<A>QC

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6 R', '3 ' % '')(' ' ';7<'+5 ' 7&>CF?3?' 3?' FC7'F''4@7'A>A7?4'?67B37?'F''B>CB7A' ** 1 ' % '!6&' ! ';7<' 5 ', ** 7&>CF?3?'>C<' BF&4F3<' >(7' V7C7A>&&I'A7] V>A<7<'>?' 'FA=?' F'' B>CB7A' Q@3B@' P74B R

&7(# +"!)'N8&7(# E+"!"I' Z$' '% ¥ +&& F +" \' &7(# :+ '%(('!& K g' / : ' %) 'C ' 9$<FUM&7' 4@7'M&>B8'3C' FA<7A' 4F' V3L7' 4?' 6AF67A' L>&U7' 4F' 4@7' VA7>47A' 47C<7CBI' 4F' =7&>CF?34I' ?@FQC' 4@7A7MI

&7(# + & 8'N8&E7-!L"+ b08I' C* ' Z$ 8 , ' %'* / $0 A,' $' ' 047 >LF.' / ?* Z .7('B') /-%+&&, \' #(7/(' .&? #/"#/' ! ' !%&' (%'* / $ B' (',"=+" #' +:.F ,&' '%(('!& "D&, .)' ,(B' 7"=('& :+' + &+' &#'& &7(# E' + &E### 4' %

@7' VAFU6' F'' 7.

(3V@.'cU#<' &FQ.Q>47A' =>A8

&7(# !"'' ;=7&>C6(4385' %' P! FA=7<' >'47A ¥' +&& I

>' @% >' %(('!& "D&,' .)' 8&7(# +"+' 1 $!%& #(!:& $' 8&7(# +"+

% , ' F**! ' +!,' !';7<' 5 ' % @7' =7&>CF43B' <76F?34' 4>87?' 6&>B7' 3C' 4@A77' <3?43CB4' 'FA=?.' % +' ! 0 ') ' ' ! KKK' ' @7' =7&>CF43B' 6>4B@7?' >A7' CF' <FUM4' F'47C' F''>' <3''7A7C4' ?@><7' % * ' ! ' ' * ! ' @% * '07<' ,5 K3)' ?47F3<.?>ABF=>' =7&>C643B(?>ABF=>' >C<' BI?4&B.4? ABF=>' @>L7' M77C' <7?BA3M7<>?' <3?43CB4' L>A37?3?' % * ' ' ' ' ;7<' 5 % && =7&>CF43B' VAFQ4@?' >A7' ?>ABF=>4FU?

4' ** ' S M

4V;' FU" 'C ! ' ' ' +' @7'?>=7' AU'7(7C4'6@>??' 7' 3?' >66>A7C4&I'>C>&FVFU?' 4F' 4@7' =7&>CF43B' BFC<343FC' F'' =>CI' >Q8?

(&7$!# !) &' N8$7+&F#-!(" I' 7+ '"#' &'!7)' 8&7(''' !) &' Z$' ' h' I' B"#,' $'&& !) &¥' +&& J '@

T R' % '* , /' K (' 'G' ?F ' @&* B' % '* , /' @3?' 6F?343L7' 6AFB7??' 3?F'' =7A3B>C' FA3V3C' % ' *' ,B '@&* C% ' ' @7?7?' 43C' FA' =7&>CF4I67?' Q7A7' 4>87C' 7L7AIQ@7A7' K (' '),) ' @ * * B' % '* , /' FA' % '* , /

7&7 "# !7 'N8&F7(#++I'%' * /* *B' Z$'S ' /)D% 0' / D% ' .7('B' h' F :+\' "!% &#'&' ! ' %(" ' (#!" ' 8 7&9" #¥ 7('B"+%' , (B' /)' "# #97&)1+' :+&' .&7 #/"#/' ! ' !%&=(" &!)' $' 8(#B"#,' '(77&, ' .)' %"8'

O ' # ' @ ' @ , ' % '' ;7<' 5' P' *' @7' A778?' Q7A7' 6AFM>M&I ' 3C' F=7A[?' 43=7' >?' CFQ ' 3C' V7C7A>&' F''>' =7&>CFU?' L>A374I ' % + ' O' % ' % '' !>&; RI' *' ?' Q7' 8CFQ' F'' CF' 7K6A7??3FC?' 3C' CV&3?@' 6A7F?73I' BFA47-' ?6FC<7C&' Q34@' 4@7??' C>=7?' M&FC<7' >C<' MAUC7447' @>L7' >=F&47<' 4@6?7' F'' K>C4@FU?' >C<' =7&>CFU?' >?' <4?43QU3?@3CV' 47A=?' 8C ' & ' ' - ' 3C' , $ ' * *) ' % ' @7' ?83C' &387' 4@7' @>3A' 37' F''4@7' =7&>@FU?' FA<7A' >' @ &? #' +' ! ! 'L33' ;% * 5% ' @7' 1' =7&>CFU?[' Q34@' M&>B8' @>3A' >C<' <>A8.MAF<QC' FA' M&>B83?@' ?83C?

&7(!&#!, ' N8$7+&F#!& "I!' ' ' 7+ ' F!% "!&' Z(,' ' $ %' ' 'N"# "!! -I'$' ' / D% / %' .7('B' 8&!(7"'' ,)& ' "#B¥' +&& f (!"=& ' & (+ % '@ ' ' ,) ' '* 0,' % ' O R ' ,!' '" ' @ % ' ' ' '

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<FUM4&7?? 3C' FA<7A' 4F' A7&37L7' 4@3?' ?>BB@>A3C7' >C<' :=7&&3?B-' C>C4 ' =FCF4FÇ!' 4@>4' ;74B R
! &77"! ' 6 ' 7+ ' V 8 &77&! ' ,"+&(+&"#'"? ,&##! ' % +&# N+&& O: !+ I
96" ' ' / '33 ' K3K ' ' ' 7&&74 3?' >' <A1' ?B>MM7' 4@>4' VAFQ73@' L6FC' 4@'7' @77&7' PF''>' @FA?7H ' %* +' + ' V B%' ' '?7<' %*,)' ='>' <A1 B>M' 4@>4' VAFQ?' U6FC' 4@7' 77&' F''>' FA?7 ?' !FA7,'774
"! (!& N8&E"! [T!I' $ Z$' 8' H F '> \' '+(7!' $ 8 &77"!"'' ('","' O '
3 4 ' @ * % ' ' , , ' @7' = 7&&347' ; = 7&&34>47' F''>&U] =3C>5' K (' & ' +$' ' UV' ,) 0,' 7&&347('FA' @FC7!.' ?4FC7 ' Q@3B@'3?' >&U = 3C3U =' = 7&&34>47
&77"!& N8&. "!! ' 6' ' ' Z " +!' "# 8 , ' -' '2F$BJ -' >V35I' $' $L-H% #&)Y' +&& M \' (!"=&' 8&77"!(!& $(7: 8"#' : 8 ' ' : "#/' "# % #&)F)&77 *' '!(%&, (7 ')+!(7+' && (7+ ' @ $ =' + ' 4
! 3A?4' 'FUC<' 3C' MAFQC.BF>&' ?7>= ?' 3C' @UA3CV3>'
K FK') * *' (' : $ ' ' %)' FC3V?473C' '@>?' >' &3V@4' I 7&&FQ' BF&FUA' Q@3B@' @>?' B>U?7<' 34' 4F' FM4>3C' 4@7' C>= 7' F'' = 7&&347 ' FA' @FC71' ?4FC7 ' >4@5' ' ' ' ' ' ' ' ' ' ! ' ' ;7<' 5 *+!' ;<D<' @ * ' * %(B' *)& ' % '))
7&&347' FBBUA?' >?' >C' >BB???FA I' 3CVA7<37C4' 3C' "AFQC' F>& !'+!&77"!& ' % ' % I@' Z(, ' $ 0+ ' -' $ 0' $ ' % #&) \' #&)&, ' +*&&!
) B0%%' @ % % ! ' *' ' 6' 33 ' ,) , ' U4C=7' ' @FCV7' @7 =' P??A.' L3B7?R' L6' 3C' 6&>B7' F6>87' >C<' <A37# C<' QIC' = 7&&347' P ' % /%=' >?' ?73<' 3? ' ?>C7' @7 =' ?@>&
&77"!" ' ' N8&7"F!"BI' % ' $ Z$' ' 6' H F>A' ($!&' ' $ 7+ ' N 7(!%! \')'%) !' N "(0 : I ' !%&' &' :7"(' ('"," $ 8&7"!&' N "+ ' '("",' 8
%* +' ' - ' % 'B' 3 / '@ * ' ' 66' +, ' 3 F>' (' $ ' ,-* S&>6AF4@' 'FUC<' 4@7' = 7&&347' BF = 6F?7<' F''>&U = 3C>' >C<' >' 67BU&3>A' >B3<' 4F' Q@3B@' @7' V>L7' 4@7' C>= 7' F'' $)B' >B3< ' % ++' J * ' $ ' * ' 7 ' &343B' >B3<' 3?' ?F&UM4?' 3C' Q>47A' >C<' >&BF@F&
&77"!" 8 ", &' N8&""?!" 8 ", I ' $ Z$' ' 6' H 8 H ' ' ' 8 :#,' .!("#&,' $ 8' 8&""!(!&' $'(8 8 #": 8
3 /?' (') $ ' * ' >A> = 3<7' FA' 7&&343 = 3<7
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% ' @ (' F '' , ' 'C ! ' U66&' 33 ' %))' $ % 7&.' &3LFAFU?' A7767A' K >>' O' F ' ' 'C ! ' %)% 73&3.' LFAFU?' FC71.7>47A' % * '' $ % + % ^?' ,% ' ' 6>A4&I B>AC3LFAFU?' 6>A4&I' = 7&&3LFAFU?' <374
&77 ,' # ' +&& &77 #&' N8&F7,:#!' $' 7+ ' 8&7N7I #' Z (8&,' .)' "&.."/"# >45 ; $' $ 0'N(+"# ' (8 H F ' ' 8 :#,' $' '(. # (#,' #"! /&## .!("#&,' (+' (') &77 *' * ,&' .)' !%& (' !" # $%&(!' # '& !("# ')(# /&## ' 8 :#,+
% '37 05 ' * $ * ' (') ' F ' ' ' % ' 37M3V' 47A = ?' 4@3?' B34AFC. BF&FUA7<' 6FQ<7A' $ * ' ' % ' ' ' ' $ ' ' C * ! ' ,' @7' A3B@7?4' MF<I' 3C' >EF47' 8CFQC' 3?' = 7&FC' Q@3B@' 3?' BF = 6F?7<F'' E(' 6 ! *) ' 7&&FC
&77 #" , &' N8&F7-#+",I' $' Z$' ' FF \' ' ' 8 :#,' $' 8 &77 #& * "!%' (' 8&!(7(' % +?' ' L ' + ' $ '33 ' 34' 7&&FC3<7' F'' 6F4>?.' +": 8 ' 946(' ' $ ' %, ' @I' '63V
&77 ## &!' N8 &7$$#": &!I' $' Z$' E ' F' H2$ I' R'
>4 ;>' ' $ ' ;7<' 5 * ' 7&&FC ' BF = M3C7?' <3A7B4&I' Q34@' 6F4>??3U = # '>' = 7&&FCUA74' F''6F4>??3U = ' P3?R' 'FA = 7<
&77 * ' % 8+Y R 8,7 * I' RF6 8&7 * &' 6 8&77 * &' 6F' 8&77 * ' Z " +!' (&(+"# !%&' >R!%' ' & %' ,&=&7 &,' $ 8' + 8& :# &? ' ,&,' (!! " .:!"=&' :+& $ ' $ *' N+!&8' $ G04,' ' $ *G ' ' 6B ' $' 8 , ' 7&8"+% $ +G' + $!' 8&77 *' N (#'B'+=' * 4
C' ?7C?7' 4@7' ><#' BFAA7?6FC<?' ?4A3B3CV&I' Q34@' 7>A&I' * ' ' $ %$' ;>' F= ' 7U4' QFA<5' Q@3B@' =>I' 6F???3M&I' @>L7' 3C' &U7CB7<' 34?' <7L7&F6 = 7C4 R $' $$:"!I' $!' +*&&!' (#,' 0:"'') *"!%' " &##&++' 7+ -
)' ++' @ *$ / ' @% ' ,0%' 7&Q7' FA' &I 67' 2@' = 7&FQ75' -+% + $ ' % ,)' @ '@ ' <'7' %5 >A6'M ' @I C87' @FQ'VF<' = >I' = >87' F''4@>4' VA7'C7' >66&7' >' ?Q747' 'AUI 47' 'U&' = 7&FQ7 ' >!=W , ' - 0,' 7&FQ7' >?' 'AUI 47' 3?' $ + ' % ('! H ' '% ' 6 + ! ' ,' @3?' VA77C7' 'AU347' M773CV' V>4@7A7<' M7' FA7' 34' M7' A367 ' 37?' AF447C' M7' FA7' 34' M7' = 7&FQ' %) *' ! # ' * ' 'L3' >AA' ?' 7ABU&7?' <3<' ?@>87' <FQC7' 7&&FQ' ! AU347 ' K)KK' ' ' @% ,' @* $ $ ' /% ,' A367C7<' 3C' ?4A>Q' GB # = >7' = 7&&FQ' MI' >A4 ' ,) , ' ' # (' V' + ,' A367 ' K) K $ ' ' /% ' ' % '3C ' 333 ' +,' >AU7' <AF6?' @3 =' <FQC ' Q34@FU4' I FUA' 3C ' 387' = 7&&FQ ' ! AU34 ' Q34@FU4' >' 3C47A' 4FA = ' -*K ' !H ;% *,5 ' ,))' F = 7C ' &38?' ?F = 7' F4@7A' ! AU34 ' F?7' 4@73A' A7&3?@' Q@7C' 4FF' = 7&&FQ ' %*)' @ ' ' ' ' ' ' ' ' '

8 ; HH / G , . K

L4$

! ; H / @ : % 8 %

&#'& &7 ! (2/7 '%
' 'N ' *+' % ' ' %' ='3K '% ' F4@3CV'=FA7'
7& BB4U>&I' M>C3?@7?' >' = 7&FA&>V3B' ?4>47' F'' =3C<' 4@>C' 4@7'
FM4AU?3L7' UV&3C7??' F''4@3?' 6&>C4
&7 ! &'N8&7 ! '" I' Z$' ?*0'+ #/'
8&7 ,)'H 0O !: #'#/ \' "(# $"!!&,' *"!% ('
8&'%(#'' (7 ,&='&' $ ' (:! 8(!'' (77)' & ,#&'#/ (
"&'& $'8:+"' .)' 8&(#+ $' (' 8&7 / (%+!&#''7
% ' $)%*') ' *)0(' @7'=7&F4AF67'3?'=7A7&I'
=7B@>C3B>&' 3C' 34?' F67A>43FC' >C<' 3?' 3C47C<7<' >?' '>A'>?' 6F?]
?3M&7' 4F' 3=34>47' 4@7' =F43FC' F'' 4@7' '3CV7A?' 3C' 6&>I3CV' U6FC'
4@7' 87I?' F''4@7' 3C?4AU=7C4
&7 !! ' &7 ''#N& ' .+' $$'
&7 * N& ' &7 * & .+ $$' "'' *'(
!' &7F &7?' %!' 6 ' Z(' $ ' / B'
"#=& +" # +X / 0$ "R'. (
/K)FF' : ')) ' @* ' L333 ' 3K' :" ' @7F<F?3U? ?&7Q'
=7&.67&' MF4@' VU3&4I' >C<' 3CCFB7C4' 4F' 4@7' CU=M7A'F''
!' &7 28&#"+77'%>' 6 ' Z$' /*$ ' '!%&
:+&* %' &+",&,' =&' ! (/&,)'H F 4 \' (/"'
K FK' (<<' / ' ! !' ,' ' VA' @I?F'=7&6F=FC3?@'
U&3>Z
!' &7 +& ' 6 ' Z(,' %(((''&:!' ' $ '
* '% #&)' $!%&' +&\'E ' &(!" # ' 8 +&,'
$' *,& &,' +&F7&(=&#* *"!% % #&)' (#,' (7' % 7
%* ' 8 # ' ' + %)') !' ' U?7<' Q>?' >
=3K4UA7'F''=7&.AF?7' Q34@'?3K477C' <AF6?'F''4@7' =UA3>43B'>B3<
&7+% ' 9 :&7'%' N8&7?1'%' *'! % ' 7+ $
,' 8&7+ %' R 8&7"++'%&' Z & %' & ' c' $- 8
$,)' B$)' 8&77 *' N"# $)' % / / %B' 8&77 *'
(7&+!'L' /# *'< @ 2) 4$%G%"!' :+%' %&
' * ,'+&&8+!' %(=&' .&&#' #$:+&,'*"!% $)'
% #&)&,' ' /#'*' !%' $ /'% #&)' $' I'
&7 *'+ $!'!&#,& ' $'*&(!%& Y "7,'(#,'<+ $!'E
% ' C% ' @' ' +# ' &+# ' B * C > '
C' VAFUC<7' 4@>4' 3?' =7&B@' >C<' ?FC<I' ' C*! ' ' ' '
=7&3??B@7' ' '' % ' ' %B * %"' %* #'<'
3C' '(' < ' 4@' 7A'k% 5 '+ 0% 7AI''3C7'=7&B@'Q7>4@7A'
PRN' J *'' $,' * ' B' 3B7'=7&B@'=>8
F[>'=FAC3C-
*$6' %)+*' "-' *$ $' '3' % ' '=74>6@FA' 'AF='
@!AUAV7FC?'Q@F'=U?4' CF4' M7'=7&B@.@7>A47'<?>34@' 7&?U2'
MU4'6>A7'>Q>I'4@7'<7>' <'&??@' '! & ' $ 'F*'C% [
$%'' 333'1 >< [':?>3<' 4@7' V&>??=>C' '6UI&&3CV' FU4' @3?'
6FB874.@>C<87AB@37 ' ' <3<C'4'U??<'4F'M7'?F'=7&B@.@7>A47<
&#'&$'7 &7+%7"&(,'F% ,'" &##&++
%'3 >?'@ * '@ % 'BKL333 'PBK3K'?%+*' B@' BF=' 'FA(7?' 3C'
=7&?@7<7' ' =7&?B@@F<7' + / L ' ' '$%+ % "
! &7!' 6B' 6' Z '(' &9"'(# $ B' ^

% ' # ' / 'C% % '%6'3'3' ! ''))' @7A7' =FUC4?'
4@7' 7&4' P!A >' @*+ ' ' O=Q@3B@'?7AL7?'3C' 7K3BF'
!FA'Q7>6FC'QFF<'C77<&7'>C<'4@A77<;4F'?FQ75
H &7!' 6' N &&O: ! I
> ' ' $*+ ' ' ' 7&4' '@776' >C'
>MUC<>CB7'F''"&FF<'Q@3B@'=U?<M7'4>87C''AF='4@7=
&7!'N8&7!I' 6a Z$' 'DH7\
$' % ' '' ' $ P "# !%& '&++' $8&7!"#/
% *' # (3C' C %)&G?' % ' 7&4' 56@ @7' AU?@'F''
4Q<F' ?4A7>=?' 3C4F' FC7'>CF4@7A'MF4@'M73CV'MUKF='Q34@'?CFQ'
FC'4@7' =7&4
4' &!(7' !%&'+!.+!(#'&"#('8&7!&,'' #,"!" #
% +' @ % $%)':, ' '+ ,' @7' :=7&4'[FM4>3C7<'3C'4@7
=>CU'>B4UA7'F''!7AAFB!>C3<7'F'' F4>??3U=' '%)'1
*' J * & ' '')' AFC'Q@FA8? =7C'>AFUC<'77&3CV'4@7'
=7&4'Q34@' @UV7' BAFQM>A?' %)' '5 '4A'C ' &('
*%0%' * +'M3R 7&43CV'Q34@'B>U?43B'>B3<' @7' =7&4
3?'4@7C'>&#FQ7<'4F'BFF
'O:(#!"!)' $'8&!(7 8&7!&,'(!' #& &(!" #
K)' / ')'7B % + B'%*' ; 7C4'5'%,)*'=7&4?F'?CVF4?
Q7A7'=><7'FA'BF3C>V7'<UA3CV'4@7'I7>A' % ' 3 !'
% '2=' @7' 'FUCB7?'F''VF&<'Q7A7'<3L3<7<'3C4F'%<F'
=7&4?'=F'' * ' FUCB7?' 7>B@' >C<' 7>B@' =7&4'?76>A>47&I'
4FUV@7C7<' 7$' ' '%' 6)&*F /) K' B'
>'B@>AV7'F''=7A>&'6&>B7<'3C'>'BU6F&>FA'6F4'FA'=7&43CV' @7'
6AF<UB4'F''?UB@'>'B@>AV7'3?'>&?F'B>&47<>'=7&4
%&' O:(#!"!)' 8&7!&,'*"!%"#('&!(" #" ,
% ' % ') ' = % ', 7B' ,0 ' @7' =7&4'F''4@3?'B&>??
F''3AFC'7?67B3>&&!'3C' BF4&>C<'@>?',M77C'7KB764$FC>&&!'@7>LI
&7!'N8&7!!' D' @%' ' 8&7!&, ' @%' / /
8&7!&,'8 7!&#' 8+0'" 8&7!F'8"&?!F'8"7!F'
8)7!(#' 5F5 8&(7!+#' 8&7!&#' 5 "F8:7!&#'
$'8&77!&##'5F6'8&7!& ;8&&7!& ;FR8(7!N&
;F6'8)7!N&'NR 8 7!&' 8""7!&'6 8&(7!'8 ="7!I
;F' 8&7!' @%' >'8&(7!'2/ '8:7! #!'N+&I8&7!&
5FR'8(7!N&'.' 8&7!"!' 8 7!"' R 8&7!7, ' RF6
8 7!&'6 8 :7!&'8 7!&, '6F'8&7!&, @%/ / '"
+&8 7!&#'+&8)7!&, '5"8&(7!'"8&7!&'"8 7!&',
8&7!",N&' 8&7!)(' 8 7!", ' 8:7!&#' 8)7!';FR'
8 7!)#N&' ;F6'8 7!&' R 8 7!#' 8 7!)##), '
8(7!)#' RFV'8&7!' 6 8&7!&#' 8 7!&, ' %)
)8 7!' RFV'8 7!' 8 :7!' V 8 :7!&#' 4 %)'
)8 7!&#' ;F'8 7!&#' 6F'8&7!&, ' Z "/"#(77)'
!*' ,"+!"#'!' =.+Y N"!' !%&' "#! (##"!"=&' +! #/'
=.' ' %+' N (' !' $ % ' ' $+ *' '
7' $* ! N@!'!%&' *&(B' =.' N'(:+(!"=&' $
!%&' $ 8& !' ' $ %' ' $, %' NYW &%"+! ""'
>$ % 8%' '>$% 8%'4' &+ #,"#'!' ' $ %
!' ,"/&+!' !' +8(7!' N/ ("#!' !%' >$% 8%' ' !' ,"+?
+ 7=&' *%&&#'&' %$% ' ' =.7' +, ' ,"+ 7:!" #
N! (#+7' $?G ' @ "8' "=' 6I' # ' !%&
+! #/'=.' *(+' (7*()+' "#! (##"!"=&' !%&' *&(B'=.'
*(+' # 8(7)' ! (#"!"=&' ' :!' + 8&!" 8&+' "#! (##"?
!"=&' 6 ' !%&+! #/' (#,' *&(B'"#&7&9" ##' *&&

:+&,' "#,"+' "8"#(!&7)' !%&$ 8&' .&' 8"#/' (,:?
(77)' 7&++$&O:&#! # !%& >6!% ' !%&+! #/' ('!'
N"#' !%&$ 8' $* $ 8' !%&' (#(7 /)' $!%&' (
7& !' *(+:+&,'/* ' .)' (' $&*' * "!&+' .:!' *(+#!'
/&#& (77)' : &#!' %&+! #/' (' 7&' "+# *' #!)'
&!' (#,' %&! "'(7 &9)' (+' (,0' N+&&
/ / ' (!' (#,' &=&#"# !%(!' :+& "+ 8& &7)' 7"!& ( )
@7'AFF+' 7U+'>$ 0';!#$ % 0!' $+ 04'Q@7CB7'>&?F' $ '
'A76A7?7C4?'>C'&C<FV7A=--=(02':,!' $ * !0'=$!04Z'Q@7CB7'
A'- D '4F' =7&4' 8A' $!+'?F'4' ' $ * ' 4' 37' 6AFM'
>' L>A3>C4' F'' 7U4' $ 0' ;!#O C<FV7A=' > $!04#' ?77'
/ * $ '
$' #! (#+"!"=&+&#+&+
$' '.&' 8&7"O:&$"&,' .)'%&(!' *' $ '%G%,'
.& ,&+!)&,' ' *(+!&,' .)' .&"#/' 8&7!&,
C *G+ ,'G' 7?B7&'>C7?@Q>7+=7&>C'=3<@>=' =F<3#>C'
/ FF' ' % ' * ' ' >A' ' >' FC' C3@4' BF=' &7F@4' F''
@7F'FCU=' ?Q>' @>4' ?Q>' ?UCC7' M3F' FC' ?U=7A>' FC<' /% ' 3?
(7=7&7((' FC<' /% ' Q>747A' Q7>A ' Q7>A=')'% ' B ' @'
; M5' L33 ' *' Q>7>K' =7&47<' %'%,% ' : !%'%', ' 3?' =F<'
'7CV' 4F'M7>47C' >C4' @3?' =7>A3' 4F' =7&47C' C*!' ' =7>&47CR'
)' */ ' '3C' ' ' ' ' ,**' 6F' @7' Q>?'
3.&73<' 6>A.FC' ?' Q7K' 6>4' VA7<3&7' =>&4' >Q73' % ' 's !'
3*!' 'KL3' ,%' @>CC7' 4@7' ?UCC7' M3V>C' 4F' @774' 34' =F&43<'
&K ZF' D % s !' 34' =FU347R' % *' D 6 (' ! '' ; F&25
' ' @>CC7' 6>4' 'AF?4' V>C' 4F' 6>Q7' >C<' 4F' =7&474E AA'
=U&47' =F&47' =I&47R' + ' B *' **& ,06& ')' >87'
'>3A7' VA7B7 >C<' ?7347' FU7A' (' 'IA7' 43&' @34' =I&47' (%+)'
(' ' + '] ' J % ' K&L333' *G ' %, ' @F?7

>A?7C3B' >A7' =3K7<' 4@7'43C'37' 4F' M7' 6U4'3C' (4@3?'?FFC' =7&4?'
K)F' =F' %)' ' 333'2*' B7' M7'FA7' ' =7&4?>44>3C?' '
47=67A>4UA7'F*' J'!>@A
.' #!0 ':7(' %) & . 7&Y ' & + " &@9'&++"=&7)'
!' +:$&&' &9!' &8&#&(!
%* *' *= ? ' ' &V' %)*'3C'3' ' M&>B8' MF>A' B>=7'
<FQC' 4@7' @3&&' 3C'>'HFV'4AF4Y ' I' =>?47A' =7&47<' >?' '>?&' ?'
>'6F4' F''6F=>4U=' % ' 5 ' ' 'C %G' '
>A' ;% 5'+*)' (@>L7' CF' C77<' >C' 7CB@>C47<' C>K' '3VUA7'
4F'<U&3B>47' =7''FA' '>=' =7&43CV' U3' =I'6AF67A'6?A?FC' M7'FA7'
4@7' '3A7
4' .&' 8&,"+"#!&/ (!&,'7"O:&$"&,' +$!&#&,
&' / .)' !%&(/&#')' $ 8 "+!: &' !' .&,"++ 7=&,'
*' $,' ' ' $ *+ Y +(",' $ (!"'7&#' $$ ' ,!%(!'
(& &9! &8&7)' !&#,&' E 7# ' $' $,Y ' .&
,"/&+!&,
%'% *)'3C' A. 33&787A' , 0 ' %) ' ! *6!+'
=I@' B3FFF' %3') !' $$' %)' >47' =I&4' @AI67A7?'
'3>7?B' , '3 :$&&' 5J7A' :'E) @7B&F447?8767'4@7'Q@7>4?'
Q>A=7>&&Q!C47A'>C<'>4' >AB@7'4@7I'QI&&'=7&47'>C<'MA7>8?'
>C<' '>$ 3C' =>CI7' ?=>&&' 67B7?' % ' ! # ' ' % '<+ ' '
$/ % ! ')-'3'P 7&FC?R' Q@3B@'M7 <AI ' I7&' =7&4.'
3CV' 3C' 4@7' FU4@' % ,4 ' $ 'V') ' *$(' 3L'
%' (C' ?@7' =>87' IFUA' A7>&' 37B8I' 6>?47 ' >?' =7&4?' 3C' IFUA'
=FU4@'>C<' &37?'>&&' U6' &38?'>'6U''Z
H $' I%&. ,)Y :#,& / ' : !" #' ! '
*(+!&%G%, ' 6 'E
)X, ' ' ' ' ' ?#FU('7U7A7' =><7'3?'MF<&
4F' =7&47' >.Q7' ' C% ' @' 'L33' KL3'
;%+ 5' ,' 7' 4@>4' 3?' MI447C' F'' >' F8>4AIB7' =7&4I&@'>C<'
?Q7&&I4@'>C<'B>?4I4@'L7CI=' >C<' <7I74@?F<>IC&I
' ' $'7 :,+'=(:Y ' ,"++ 7=&' .&&=((!&,'
,"+ &+&,' ! '. &(B ,"++ 7=&' *' ("#
'F%G'+!F '? ' ' 3?4' =UV7<' FC' 67' =FA' =>&4' FC'
67' =FUC47E' %)+' <D B ()*%(' ' ' !
'L33' 'VA7>' >MFUC<>CB7'F''L>6FUA?'AF='4@7' >A4@'>C<'
B7>C ' =7&4 3C4F' Q>47A' % %+' # ' % %' 3@' ' @7'
L>6FUA?' AFUC<' 4@7' =FUC4>3C?' BU3 <' 7&4' 3C4F' =FAC'>C<'
3V@4' >Q>87?' 4@7' QFA&<' 3)' # ' %3'H K3L')'
@7' <7C??' B&FU<?' Q@3B@' @>C<' BA>=7<' 4@7'VFAV7 '=7&47<'
>Q>I' % *' :@ ' + 'KK3L' @7' B&FU<?' @>C<' =7&47<'
3C4F'>'?=>&&' >C<' B@3&&UCV'A>3C
' ' =(#'+%' ,"+(&(
K)KK' : ' J ' ' ' 3C 333' (' 34@' ?@A3787?' @[7'
=7&47<3C4F' IA7' K)3K' O' ,$6'%' &33' , 9 $QFU&<' @>U7'
'F&&FQ7<' @3=' 438&' @7' @>C<' =7&47<' AF=' @7' ?=>&C7???' F''>'
C>4' 4F' >IA7' ' ,%' 4 ' $' V') ' *$(' 'K3L' %,'
@7C' B>UV@4' ?@7' =7&47<' AF=' 4@7=' >V>3C' &3B7'>?U=' =7A'
B&FU<
$(' & + #'%"+'>+ :7[';>%&([' E'&&&7'#/+'&!'
$(' ' .& =& *%&78&,' *"!%,"+8()' / "&$
@7' 3<3F=' M' >66' C>43L7' 4@FUV@' 4@7' 7K>=6&7?' 3C' 4@7'
L7A?3CF?'F''4@7' =3M&7'>A7'&347A>&'4A>C?&>43FC?'AF='4@7' 7MA7Q
)'EFFF' '@ ' ; @ 5' KK' ' 6FCC7' =7' =>7H7C' >C<' =F<
=I&47' FC'@A7 A7'C7'FA&/7&'6U' =7'&3'37C<7' F<')'% ' J
@% $ '+ +'G'?7667'?387'%G'?3CV' ?>=7C'4F.V7<7A7' G'=7&4
C73(@'FA'=FU=ICV'G'=FB@7'3F37'=>87' Z'%'%))' &
*$' * ' +'G'?7667'?387'%G'?3CV' ?>=7C'4F.V7<7A7' G'=7&4
VFF<' @>4'C3:@'?@7' =7&474@'&FA'6UA7'QFF<')', *@')'
% ' 'KKKL333'K ! % '4' +" >&4@3?'@>A4'FA'<A7<?U&<'=7&4'
% +)' #$ '@ * ';%)*5 * ' I'@7A47' 'FA' QF' =F&47'
) ' ' ; 7C7L5'@ 'BK3K', I'?FU&7' =7&474@' P%
!U =7&474@'>Q>IR' 'FA'@7>U3C7?' K)EK' 'B*
33' ', UA'@7>A4?'<3<' =7&4
' ' ' ' '

4QF' - = 7&4ICV7' ?@F667?' F'' 4@7' VF&<' = 3C7?' F'' 4@7' &>C<7' F''
3?6>C3F&>' 4?' = F&47C' I7>A7&I' 4@A77' @UC<A74@' 4@FU?>C<7'
6FUC<7' Q8IV@4' % -' %6*+ ' *$ $ *·' &F?? '
% */'%' !'@ %' '4@7' 'UAC>B7?' U?7<' 3C' 4@7' = 7&43CV' >C<' BFC/'
L7A43CV' F'' 3AFC' 3C4F' ?477&' >C<' 4@7' 6AF<UB7A?' 'FA' 4@7' = >83CV'
F'' V>?' 'FA' ?UB@' 'UAC>B7?

\ &7!"" -' N8&7!*'/I' //V' %' Z$' ' H'
F ' 2$7"(!' 8&7!+' *#+&##&#' $'!%&=.
> ' #*#! (#+"!"=&+&##&#' Ÿ (' %(!"+'# '&+' $
7"O(&$('!" #' $' ' (.7& $' 7"O:&$('!" #' $:+".7&
. / 7+ ' H' ,&'()"#/

)*+9' ' C% ' '@ ' '+# ' L33' B * C >' @7'
7&7 = 7C4' >C<' = >47A' F'' Q@3B@7' >&' = 7&4ICV' = 74>&' 3?' = ><7'
P ' *$ ' +$ ' 7+ !% +$ ' *+$"' ' 2 ' '
') ')) ' ·;%) 5'%)%# 3?' Q@F&7' MF<I' &>A<7<' >C<'
<3?43&87<' = UB@' &387' UC4F ' = 7&43CV' Q>K' > ' '@ ' *B'
' ' *' %%%'33 ' %) ' FCFA<' !UC7A>&&' 'FA' 4@I' = 7&43CV' BFA?7 '
' / ' %6* % * ' ' *)' @7' Q@F&7' 3?' 4F' @7' 876 4' 3C' >'
= 7&43CV' ?4>47' 'FA' ?F = 7' = 3CU47?

. "&7,'#/'!'I&#,&'&8 !" #'$&&@"#/' '&9 &++?
"#/' I&#,& #&++' "!);!&($:7' $!&#"# % ' '
$ ' '$**1,'($!&' %(B+
3 ' : ' +) '%,,*' >B@' 'F&FQ47' = F3?4C7<' &387' >' = 7&4$
3CV' 7I7' % *' O' , ' '0S '3L' 3L' , ' ' >C<' 67C' ;>?'
>15' 'FA' = 7&43CV' @>A3437' +> 7 O' : ' ' ' '3' %, ,' F'
477&7' Q3@' L>&FUA' @7' = 7&43CV' ?63A34?' F'' QF = 7C' > *'
' '33' + ' &M734' LC.L?7<' 4F' 4@7' = 7&43CV' = FF<7' %) '
J * + , ' %''KL' :' UA' BF = 6>???FC?' >A7' 4F' M7' = F?4'
= 7&43CV' 4FQ>A<?' 4@7' = F'' >&&' F4@7A?' * ,· *' " ' %/'
)&' '' @>4' VU>A<?' 4@7' 6UA34I'F'' 7&43CV' = >3<?' C'
BFUA4&I' M>3&?' >C<' = 3<C3V@4' = >?YU7A>< ?>Z' % * ' 8 & '
% % ' L333' *,' 7' Q>?' >' @3V@ - ?63A347<' FAC>= 7C4>&' IFU4@'
Q34@' ?F' 4' = 7&43CV' 7I7?

' ', $' + :#,'Ÿ "O:",' (#,' + $!' ,&7"' (!&7)' 8 ,:?
7(!&, ' 7+ ' $$ 8 ' ' 7 : ' &!'
3R5R' ' , %' :' , , ' F' C?4AU = 7C4' @>4@' 4@7' FUC<' ?F'
7&43CV' >C<' 6AF&FCV7<' >?' 4@7' A3?@' >A6 ' > ' 4 '
*' %+,' @7' = 7&43CV' LF3B7' 4@AFUV@' = >E7?' AUCC3CV '
+ ' < # % <' *' C<' 4@U?' 3C' = 7&43CV' ?FUC<?' @7A' ?677B@'
H7V>C' %')6/)' s '@* $ ';%*%5 *' @>4' ?476 'Q@F?7'
bCF43FC' ?77 = ?' 4F' ?Q3 = (' @>4' = 7&43CV' @>A = FCI' F''&3 = M') 9-+'
& : ' ' % $ / '3L' :' '%, ' @7' = F?4' 7KYU3?347' @>A]
= FC3?7 ?F'!4' >C<' 'U&&' F' \U?@7<' C<' = 7&43CV' ?6>B7?' F''
BF&FUA' + ' ' C%6, *'' L' 7A' 6A744I' = 7&43CV'
C>43L7' <3>&7B4

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&+ ' $ =(" &!"&+' $ &(' (7+ ' $'!% +&=("&!"&+' $
&('%!%(!' (!'&(+"7)'$ 8' !%&& +! #&!' '$'
> ' '' F ?F ' */+' '3' ';%) *5 "M' FU'?@>&' @>[?F=7'
Q3&&' ?Q>&&FQ' ' = 7&43CV' @73A7' >?' V&3M&I' >?' IFUA' U4B@' 3&&'
63&&?' F'' MU447A') 67>* ' ,) ' / / '?L') % ' B'
@3?' 3?' >' L7A I' Q7&&' &>LFUA7<' C7B4>A3C7' F'' >' ?F'4' = 7&43CV'
HU3B7' >C<' 6>A4?' 'AF = ' 4@7' ?4FC7' * $ / ' % $
' *' %+,' U = = 7A' 67>B@7?' ;BF = = FC&I'<3?43CVU3?@7<' MI' 4@7'
>667&&>43FC' F'' = 7&43CV' 67>B@7?5') 97+' $ ' /) ' 3'
;% *,5',*' F'FC7' QFU&<' 7K67B4' 4F' A>3?7' >' '3A?4.A>47' = 7&43CV'
67>A' AF = '4@7' ?77<' F''4@7' Q3&<' 67>A

@ ' # ! (#+"!"=&+&##&#' ' %((!' 7"O:&$"&+ ' ,"+?
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+>M+' ' %' K3L' ,' ?' Q@7C' 4@7' = 7&43CV' A7' MUAC74@'
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'' 8?' % % '**' F<[?' 67>B7' 3?' @U = M&3CV' = 7&43CV'
67>B7' %) ?' $ * '@ -) ') / '+ ' @7' B@>A = ?'
F''>' = F?4' = 7&43CV' >C<' >''7B43FC>4' A?4FA3B8')6)7=-:' ' "
% ! ' ' @3&7' 4@U?' 4@777' = 7&43CV' QFA<?' >447 = 64' @3?'
@7>A4' %* ' :* ' : ' F' %%' ' = 7&43CV' 7A = FC'
M73CV' 6A7>B@[<' 3C' >' FUC4AI';#@U4B@' 2>' ' C%6,0'
*'' ' + ' @7C' 7A7 = I'4@7' 6AF6@74' 6FUA7<' FL7A' 4@7 = 'M3?'
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&I U3CV' <7>4@')/-6 "'' * $ $ ' ' * 'K3' ' @7A7' = U?&
' >&&' = U4U>&&' A7?67B4?' >C<' = 7&43CV.@7>A47<C???' M74Q3K4'
= >AA37<' BFU6&7?

&7!"#/7)'N8&F?!"/7"I'%! ' Z$' ' / / '
%'H'F \ %&& O:(7"!)' +'!(!& $.&"#/' 8 7!"#/'
?/..' 4 '4A'( ) 'C-# ' (!' ' 34@' 4@7'
'=7&43CVC???' F''4@7A' &>CVU>V7'4@7' = FU?' = >CI'4F'634I'
MA>3&C' 'FA' >' ?UVV7?43FC' 4F' Q3C' >' ?3VC' F'' = 7&43CVC???' 3'' CF&'
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8%)& '(' B'#,' $0('B&!' $ 8& 7)' * # .)' %:#!& +'
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* # # % +&.('B' 7+ ' "# *'') * ' N+&&
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)9.*' # ' :+%''+ ' KKL333' L7C' 3= AF<[?' ??&'' = 3V@4'
&7>L7'4@7'6&=C?F'' UA>' C<' Q7>A'4@7' 7&4FC'H>B874'FA'>
?6>B7' + '' ! ' %! ' *''>'83C<'F''MAF><]
B&F4@' 2 & % 'U' $ ' ! G* &' *''
)* '>'?4FU4' = >87' F'' B&F4@' ?U34>M&7' 'FA' = 7C[?' Q7>A' Q@3B@'
3?'-6>A7<' MU4' C734@7A'6A7?77<' CFA' ń'3C3?@7<['' $ '
B4' +0+' @7' FU46U4' F'' 6A3C47<' = 7&4FC?' >4' 6A7?7C4' 3?' >'
VFF<'<7>&'>MFL7'4@7'>L7A>V7'F''>' I7>A'>VF
&7! #"(#' N8&7!-(8"(#!' %'(#,' 6'Z$' *''
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?9*' ' : ';(,00(5 ' !7Q' <7>?' M73CV' 3C4?' 4F' >&'
FU&<.M7' 7&4FC3>C?' &&3?' CF4' VF&<'4@>4' V&3447A>?# 734@7A'
<F7?' S7763CV' FA?77' >4' 7&4FC ' >C<' = FUC43CV' 4@7' ?B>A&74'
>87' @7' 7>&' 7&4FC3>C ' % + ' ' '),) ' + % '
/* ':'%) *' &&' A3<7A?'>A7' CF4' 7&4FC3>C?

& 7! & Ÿ +&& FH --
& 7!), ' & 7!) & '=('$$' ' "'
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;K) (5' ,) ' " U4' >M&7A' 7C? ' Q3&' 3= 6AFL7' 4&37?7' @FA4' 7-' = F3A7?' 3C4F' >' &>AV7' 3?4FAI ' >V; 6' 7447A?' >C<' 7= FA3>&?' F'' 4>47 &?F' 7= F3A?' F'' 4@7' 3L7?' >C<' B43FC?' F'' 4@7' I<C7I?' >V6@' ' ' %' ! , 'L3 ' KKKL3 ' @7' 'FA&FQ3CV' = 7= F3A?' F'' = I' CB&7' FMI[?' BFUA4?@3&' >V63 ' 3 ' F' %, ' * ' ;% + 5 *" @ I' 4@7C' >' QA347A' F'' = 7 = F3A?' 3?' >' M7447A' 4@3CV' 4@>C' >C' @3?4FA3>C' >V3A' #' * % '@% + ' 3' K F' <7&3L7A' 4@7' @3?4FAI ' FA' A>4@7A' = 7 = F3A?' F'' 4@7' @3?4FAI 'F'' 4@3?' ?>= 7' 67A?FC ' K FF' 1 ' ' * ! ' + ! , 'F* / 'L ';7<' 5 +*' M73A' Q@F&7' ?4AUB4UA7 ' ?7AL7?' 4F' 6AFL7' 4@>4' 4@7I';4&7 ICF643B' F?67&?&>A7' = 7 = F3A?' >C<' CF&' @3?4FA37?

. ' & + #!&* " "!!&## (' ' :#f $"#'", &#!+' "#%"+' *#7'$&' $'!%&& & + #+' *% 8' %& %(+' B# *#' (#,' !%&& ! (#+('!" #+' 8 =&8&#!+' "# *%"'% %& %(+' .&&## ' #'& #&, ' (# (:! ." / (%"'(7 &' , %)*!' # ' %, ' UV ' FA'BFU&<' 'FAM7>A7' 4F' CF47' 4@3?7K4A>FA<3C>AI'6>??>V7'3C'4@7??' = 7 = F3A7?' ')*) ' '@ ' % 7<' FUA' L3A4U7?' <7??AL7 ' >'LF&U = 7' 7C43A7' 4<' V3L7' 4@7' QFA&<' IFUA' = 7 = F3A?' FA' &3'7' >4' &>AV7' %* ' ' % $ ' ') + % *2>' F' QA347' @3?' FQC' = 7 = F3A?' >C<' &7>L7' @3?' @73A?' 3V@' ?B@7 = 7?' F'' VFL7AC = 7C4' >C<' 6&>C?' F'' QA>?' %*%' K 4' 7 = F3A?' F'' >C' C' FA4UC>47' FUCV' >< I ' 3 3 ' ! (' & ' N>46VI' @5V' CI' FC7' Q@F' 6AFL3<7?' VFF<' <3CC7A?' 'FA' B&7L7A' 67F6&7' >C<' A7 = 7 = M7A?' QM>4' 4@7' ?>I ' B>CCF4' '>3&' 4F' QA347' 7C47A4>3C3CV' = 7 = F3A?' % +%' ! " ' ! ' $$' %%*' 3?' 7 = F3A?' >A7' >&= F?4' 73CVU&>A' 3C' 4@73A' FQC' C>4UA7

' ." / (%) ' ." / (%"'(7 # !"'& 4@6 - ' ' %' & ' '3')' ; 4>C' 5' @7' ?UMH7B4' F'' FUA' = 7 = F3A Q>?' MF=' >4' "F?4FC' 3C' 7Q' CV&>C<' % ' # 'K 4' 7 = F3A'F'' FM7A4' UA477?' ?Y' `SRR' %+' ! (' C * ' % ' A7'' @7' ?6>B7' 4@U?' V>3C7<' "+' = FA7' U?7' U&&I' FBBU637<' 6>A4&I' MI' A7-QA3447C' >C<' 'U&&7A' CF43B7?' F'' C>= 7?' = FA7' V7C7A>&&I' 3C47A7?43CV' >C<' 6>A4&I' MI' 7C43A7&I' C7Q' = 7 = F3A?

#'&++()' ' ,' "++& !(!" # #('7&(#&,'+:.0&'!' # *%"'% !%&' *'!&' ')%(+' 8(,& (!" ':7(' .+& =(?' !" #+' &#'&/ ' !%&' &' $!%& '&&,"#/+' ! (#+('!" #+' 8(7&(#&,'+ '"&!) '&&,"#/+' ! (#+('!" #+' 8(7&(#&,'+ '"&!)

%'K) F' & ' $ ';%* 5' $ %+' @3&?4' 4@7' B@37'?' Q7A7' <A>Q3CV' U6' @3?' ?4A>CV7' 7 = F3A' F'' 4@[7&??BF67' %(*' ' 0 '4A' ') . ' % '3' % ' $?@>&' @7A7 A7&>47' Q@>4' '@>L7'&7>AC7<F''?F=7' ?&47?F''4@7' AB@3674>V@7A7' Q@7A7' %' @>L7'CF4' M77C '>?' Q7&' MI' Q@>4' @>?' M77C' 4F&<' = 7 '>?' MI'>' = 7 = F3A7' 4@>4' @>4@' BF= 7' 4F' = I' @>C<?' %* %' #'LF&' ' $ * ' ' >'HFUAC>&F''4@7>B4?>'>C<' 6AFB77<3CV?'F'>'?FB3741' ' '4@F?7' F'' 4@7' AF I>&' ?FB374 I 'GB')6 ' C %% ' - ;% 5' $$' ,+*' ' = 7 = F3A7' FC' >' 674A3'>B43FC' = 3K7<' .Q34@' ?@7&?' > % + ' / ' +- ' $ B' F ' ' % ' 37?B@7A[?' 3C47A7?43CV' = 7 = F3A'FC'4@7' 'FA=?' Q@3B@'4@7' V7CU?' % ,') + '6>???7'4@AFUV@' K 4' 7 = F3A?' A7>< M7'FAI7'4@7' C4@AF6F&FV3B>&' FB374I'F' FC<FC' %) .+

BE6' ' 8&8&#! ' 8&8 "(7' 6B' % bm?

%' 8 ' * ' */ F7 4' !9?'%*,%$'?D ' ''!A37C<?' @F=' 7>4@' &>I?' '>?4'>?&776' @7I' 7 = F3A?' 8776

>' *$6 /A$ G 0G > 4 '

B "33' ! " 003/A/B';%* *5% , ,+' @7A>Q' = 7 = F3A.QA34] 3CV?' >C<' UC'FA = <' 637B7?F' = B(7AC' ?4>4?? = 7C ' 'U&&' F'' 4@73A' 3C47A7?4?<' >C<' 6A3L>4?' L37Q?' 38R5' $ ' C ' ' FUC4' X3C (7C<FA"3?'B7&7MA>4?<' 'FA'@3?' 6AF'FUC<' = 3C3?4?A3>[>M3&3437?' MI'>&&' 4@7' = 7 = F3A' QA347A?' F''4@7' 6A7?7C4' >V7' K)F' ' :' %) ' *+ '++' @7C' 4QF' = 7 = F3A.QA347A?' @>C' 4FA<' 4@7' ?>= 7' 4>&7' 4@7I' P U74FC3U?' >C<' >B34U?R' >BB764' 34' >C<' 7C] <FA?7' 34' Q3&@FU4' >'?U?63B3FC' 4@>4' MF4@' = >I' M7' &I3CV'

C=''# " N=' ,+' $ 8+' $ (" 5 &8 "5L"+!' N8&E8* "+!I' Z$' (F ' * "I&' $' 8&8 " +' ' $ (' 8&8 "

V63' ' < %% ' F* ! %'' ?' * '$' % +' ;!' 5' 453 # ' $ ' +' '3C' + (' + %$' ' '* B' 7=F] A>C<>' Q@3B@'4@7' 7 = F3A3?4'Q>?'>&&FQ7<4F'A7><

' $7I&8 "+8' I%& (''!"& * "!"#/' 8&8 " +)9*#' # ') ' BB ! * ' ' > ' FQ>A<? A7<UB3CV' 4@>4' ?>= 7' 7 = F3A3?=' E' '4@7' 3V@477C4@' 7C4UAI' 3C4F' 3?4FAI

7&8 .+'$ 8' $ (' 7 = FA>M3&3>' N8&Y8, (."E"(I' Z#&:' f "' $ $ * !6 (" f &8 (.7&' '# !&? * !%)' !%'#/+' 7+ ' N (&f T ' 'C &8 (.'7&' N8&8 -"1."7LI ' + 8&!%'#/' 8&8 (.7&

@7' BUAA7CBI' E'' 4@7' QFA<' 3C' CV' = >'I' M7' <U7' 4F' 34?' U?7' >?' 4@7' >3C' 4347?' F'' 7CF6@FC[?' 1 7BF&&7B43FC? ;[5 +<'' - * 3% *4' F'' FBA>47?

cP'C ' ' ' +$ ' - ';% ,)5'33' C4AF<(' 74' U?' >4' FCB7' 6AF<UB7' FUA' = 7 = FA>M3&3>' >C<' 6AFB77<' 4F' 7KB@>CV7' 4@73A' BFC47C4?' 3 >)' # ' % ,'%+' 764' 3C' *)& % B' ?@FU&<' CF4' @>L7 'FAVF447C' >= FCV' 4@7' $ $ * %[6 %' F'' (47A<>' I' 4@>4' QF' IFUCV' !A7CB@ = 7C' = >< 7' 4@73A' Q>I' 4F' FUA' ?UM&3 = 7' 6A7?7CB7' K (.>' 7 = FA>M3&7' P?7?' 4 ' YUF4' %, R' 3 & ' % ' % ' ?' BK3' +' @7' BF = 3CV' FU4' F'' V ($' 4@7' ?FHFUAC' 3C' 4@7' Q3&<7AC???' >C<' FA@7A' = 7 = F3A>M3&3>' F''& A>7&[?' @3?4FAI

S 7 = FA>M3&34 I' N8&#'#6 (. !"I ZS'#&9!'+&&# . R' %&' O:(7"!)' $.&'#/' "&8 (.7&' 7+ ' (' & + # '!%'#/' * !% &8&8.&'#/

%36R'8& ' J* B' ?' '43';%)),5 ' C<' @FQ' >MUC<>C4&I'3C434U&7<' ??@7'Q>?R' 4F' 7 = FA>M3&34 I '4@7' 7C?U3CV' 634>6@ Q3&&' ?U''3B37C4&I' <3?FL7A' ' +' & #' K&L33';% + 5 &3 4' '@7A?' F'' >C37&[?' >MF<7' 3C' FC] B>?47A'Q7A7' <3?43CVU3?@7<' MI' = >CI'7L7C47' F''&FB>&' = 7 = FA>] M3&34 I ' ,977 # '@ '5 ' % 6' ?2B'% * ' % @7A7' 3?' FC7' = 7 = FA>M3&34 I' F'' @3?' &>?4' ?>< = F = 7C4?' K ('O' ' @ ' '%+ ' !4>C8' Q>?' >' CF4>M4?' 83C<' F'' = >C' >C<' FC7' F'' 4@7' = 7 = FA>M3&347?' 4F' AL3CV' >?' Q7&[>?' = 7')+ ;*' 4 # ' ' $ '@ *' % ' ') @7' = 7 = FA>M3&34 I' F'' >C' >B4' 3?' 3C' '>B4 ' >' M7447A' 6AFF''F''BFC?B3FU?C7?7' 4@>C' 34?' BF = 6&7K34 I

''7 = FA>M&7' N8&8 (.;17I' %0' #,' 6' Z(,' ' $* !6 ' $' $ $! +&& ((#, a " ' $'! ' $ *>' %6 ' ' $ $* %6 ,' /' $ 0 / * % ' ! ' $ 8 ' * %6 =' ' % ! 8

$' !%)' $' &8&8. (#'&' # !&' * !% &[' 8&8' . ("#/' # ! *' .&$ / !!&#

%+ ' * '* @% ' ',+%0%' @7' = 7 = FA>M&7' >C<' &>U<] >M&7' B4?' 3C' <3L7A?7' " >4>&&?' % ' 1 ' 4A') * %, (' * , ' 3' KL' H)M ' ?UBB3CB&' <7?BA3643FC' F'' 4@7' I&>C<'>C<' = 7 = FA>M&7' 4@3CV?' 4@7A7F'') ' 4 ' * %0' % '' ! ' ' 7' CF4@3CV' BF = = FC' <3<' FA' = 7>C' 6FC' 4@>4' = 7 = FA>M&7' ?B7C7' % * ' ' % ' F') ' Z ' 4' 3?' = 7 = FA>M&7' F'' 4@7' = 3V@4I' >7?>A' 4@>4' Q@7C' @7' Q>?' = UA] <7A7<' 3C' 4@7' >634F&' 'M7' V>4@7A7<' @3?' FM7' >MFU4' @3= ' 4@>4' M7' = 3V@4' >&&' 3C' >' <7B7C4' F?4UA7' K ?F' N ') ' % $ ' ' + ' 4' @>A<&I' BFC4>3C?' >' = 7 = FA>M&7' &3C7' >' = 7 = FA>M&7' 4F' = 7' >4' 6A7?7C4' 3SBB' %G' $ ' FC7' '7>4' = 7 = FA>M&7' 4F' = 7' >4' 6A7?7C4' 3SBB' %G' $ ' 0%' C' 3C47A7?43CV' A7BFA<' F''>' = F?4' = 7 = FA>M&7' >C<' ?UBB7??] 'U&' 3CCFL>&?FC' 3C' FUA' &7V>&' ?1?47 = ' (+)' 4F' M7' A7 = 7 = M7A7<' % OMQQ' ' ' ! ' C ' 3L ' ' 34C7???' FUA' 4FF' = UB@' = 7 = FA>M&7' ?@>= 7 ' %) ' ' A $ * %6 4 F 'M7' A7 = 7 = MA7<' K 3 1 ' * (' ' $' 3' ' @7' 7>?3&I' = 7 = FA>M&7' AFF4' 1<>M' ?@FA4' 'FA' <>MM&7' K >' FK' %) ' ;% +5 %+' 7CB7' 34' P4@7' F?>3B' >BBFUC4' F'' 4@7' A7>43FC5' = U?4' F''C7B7??34 I 'M7' BFCB3?7' ?3 = 6&7 ' = 7 = FA>M&7' * (B&#'#/' 8&8 "&+' *-' % 0

% *>' 2 8 s$<' J !!' ,*+$,+' @7' = >A?@I' = 7><FQ?' M7 IFC<' = 7 = FA>M&7' F'' 7BF&#74?>C<' 7?U34?

^C' 6 / ' [' 7+ ' N (&f K)KK' F Z-/3'0A3 ?+* ' @7?7' = 7 = FA>M4?7' F'' 7A = >CI' %)K ' C ' ! '%' KKL333 ' :' 3' 7BFA<7<' >?' FC7' F'' 4@7' BM37'7' = 7 = FA>M4?7' 3C' @3?' A>3VC7' %* ' ' 4 ' % ' ' & '3&&' ';% ,5 ' % '' CF' ?677<I' B>A7' M7' 4>87C' 4F' 6A7?7AL7' 4@7' = 7 = FA>M4?7' F'' FUA' '3A?#?744&?=7C4' % ' ' % ' ' U&I ' '?67C4' 6>A<' F'' UC<>I' 3C' ?@FQ3CV' 4@7 = ' 4@7' MM7 I'>C<' F4@7A' = 7 = FA>M4?7' % ' O' ' * '%' (' J KKL3 ' ;C7>A' 7C<5' 4@7' F4@7A' = 7 = FA>=7' P% .' ' = 7 = FA>M3&7R' 3?' F'' >' = FA7' <7&3B>4?' C>UA7 ' A7?67B43CV' 4@7' BFC<UB4' F'' >' B7A4>3C' '>3A' &>I ' K ?)' $ ' ' ' * 0C& ' ;% * 5 $$' ' *' @??7' Q7A7' >&&' 4@7' = 7 = FA>M4?7' F''FUA' LM34

&#'& &8 (.7&#&++' 8&8 (.'7"!)' &E8 F 9(.7)'%! ,"#(' 8&8 (.7& 8(##& ' + ' (+!' .& &8&8.&&,F

,6.6 @ LF&' ' $* %6 ' ')677' C A $ * %6 , '3C' >' = >CC7A' QFA4@I F'' = 7 = FAI ' ; # ' 3C' % ' ' ' ' 4' 3?' Q7&' QFA4@' 4@7' A43?4 ?' Q@3&7' 4F' 7K>=3C7' 'FA' @3C4?7&' QM>4' 3?' 4@>&' A3L7?' ?UB@' 6343' U&I3C] B3<7C4?' 4@73A' = B = FA>M&7C7??' % ' O' I ' % ' ' 'C7L7A' ?>Q' @3= ' MU4' FCB7 '>C<' 4@7C'A>4@7A' = 7 = FA>M&I (' K = ' %) ' 3% $ ' % ,. UV' 04' @7' 6FQ7A' F'' ?F' BFCB73L3CV' B@>A>B47A?' ?' 4F' 3 = 6A7?? U?' ?4AFCV&I' >C<' = 7 = FA>M&I Q34@' 4@7M' L>A37<' 3C<3L3<U>&3437?'

!77 &18 (7" !9' 6' Z(,' 8&, ' $ $* ! ' N ' $ $* %4' $' ' $ $* ' 8"#,$:7 +&& I' L' &8&8.&'#/' 8 #:8&#!(7' &#'& &9# 77)' %! ,'6,' *()' $' &8"#,&

% % ' $' ' J 6' '3', #' ?' @7?47A' 4>'3MA<' I4B@7'7&<(' F347C4A7' = 7 = FA>&&' $' ' Q8@>&&R' BK9 F@!' ' ' @* $;% 5 *,((, ' "F4@7' &F I 7' >C<' ?FAFQ7' = ' QFF' = 7 = F&<' K $ ' '>C4>?43B>&&R' %'% + ' 23' A0(/' J * ' ' RRA' C' 4@7' ?FU4@' ?3<7' F'' 4@7' @>CB7&' (' & 4@7??' = 7 = FA>&&I' F'' pUA' = FA4>&34 I ' ')%' $ +$' P74B R ! ' !&. ((& 6' Z(+' "$ (,' ' !) &>' 0 'G %' %' -' $ ' * ! '+ +&& (" $' (#,' F \' &8) ')'Q ' P777' 7K4' "' 3R' %+ ' % '74B' @ 6V ' ;% *,5 % #' @7' YU@ I&83?' ?>3&' A7 = >C' 3C' = 7 = FA>C?' F'' 4@7' ?>= IC' ?/ ' 8 6 ! ' %' + ' 3C' ! (' *' ;% +5 ' F' 4@>4' IFUA' FL7A>CB7' >A8' 3C' IFUA' = 7 = FA>CB7' = 7AB37' >C<' AU4@

!' &8 7-('"7,'" %' >C<' 6' 6' P>< ' ' $ B * %' ! + '0$ Y' +&& (& (I ' %!8' &='#/' (+(' 8&8 "(7)'T S^' 1 ' / ' ! V' ,' '?F67A' M7' = >< 7' 4F' @3?' <7B3-' 637? ' = 7ACF4>C<' 8 I CV' 4F' C>U7' I C' C3I C<7 C ' 6' b $' ' 8&8 "(7 2*K ,' S' / ' ! ' ^' C' >' = 7 = FA>C<' =, ' C' = 7 = FA>UCB7R' F''@ I = ' Q3&@' FU4 I C' 7C<7) (! (K))' L ' 'C*! '>'9 = '33' F<' @>4@' 3C = A3C47<' FC' 4@7' C3L7A?7 ' ?F = 7' 7 = FA>C<?' FA' 3(>4UA7?' % @3?' A7>] 43FC' 6 ! '3C' '+)' @FUV@' Q>?' CF' I 7 34C7(' F''4@F?7' >3&. 4FA = ?' ?F' = >CI' I 7>A?' >VF' I 7 4' '>= ' ?UA7' 4@73A' 473@F.' A>C<'3?' AU7' 2*K4>' 4 ?' ' 3) 7+ '^33 ')% ' @7' 7BFA<?' FA' ' UC<&7?' = >< 7' U6' MI' 4@7' 4QF' 7 = 7 = MA>CB7A?' F'' 4@7' KB@7YU7A' @>L7' M77C' U?U>&&I' B>&&7<' 7 = FA>C<>' 4@7' 7 = FA>C<?' FA' 7 = 7 = MA>CB7?

& 8 (#,'+!' % BB' 5' 4 3 = 4 T'.% R' C7' Q@F' Q A347?' = 7 = FA>C<>' K (' ' ' 7A' %', % ' F@C?FC' Q>?' >&?F' >' VA7>4' = 7 = FA>CC<3?4

&" ("- ' 7" 8' N8&8 +&8 ,-I' 6' N 7+ ' F, #(&f & 8 & 8 (#, (' NF+&8,(I' & 8 & " F (#,9 : #+' N-(&8,-8DI' Z '#&:!'+'#/'E' $' $*'B %' !+ B 3%6D ' $'$ $* ! ' N+&& ' I \ $' éN !"+!' !' .&' &8&8.&,&,'E/' 7(',' N7"B&'E !(' .&#&1f (f !%&%&(,F $ (' # !& ,$+ & 8&!%'#/' !%(f "+' ! '.& &8&8.&,&,' (' &' ,N$ ' $:!: & &&& &#'&f $+ & 8&!%'#/' !%(f %(+' .&&# , #&' *' #!)' % %+ ' * ' @% ' ' +, 0%' = FA>C<[' I>1' I 7' KK3&34' <>1' F'' FL7 = MA H 7' F = = UCI ?' P74B R ' +) '@* * '' V' ' %* ' 7 = FA>C<U = 1&' @F = >?' FA7'4@>4' M7B>U?7' I 7'3H = 4' 'FA.' I 747' = $=7 A>C<'4F' A3?4?A' "7 = >I ' ' 6A>1' I FU' A7<7' @ I = ' @>4' 4'@7'Q@F&'3?'4F'A76>1'4F'4@7' F&&7<V7'4@7' = &"F' "7>7'>MFL7' = 7C43FC7<'))'&3M ' '?@ ' +<' *) ' ' '% ' UC7 ' 7(' = FA>C<U = '4 $>= ' CF4 ' 87' 83C<' F'' = >C' >C<' FC7' F'' 4@7' = 7 = FA>M3&347?' 4F' AL3CV' >?' Q7&[>?' = 7')+ ;*' 4 # ' ' $ '@ *' % ' ') @7' = 7 = FA>M3&34 I' F'' >C' >B4' 3?' 3C' '>B4 ' >' M7447A' 6AFF''F''BFC?B3FU?C7?7' 4@>C' 34?' BF = 6&7K34 I

''7 = FA>M&7' N8&8 (.;17I' %0' #,' 6' Z(,' ' $* !6 ' $' $ $! +&& ((#, ' $* !6 ' $' $ $! +&& ((#, a " ' $'! ' $ *>' %6 ' ' $ $* %6 ,' /' $ 0 / * % ' ! ' $ 8 ' * %6 =' ' % ! 8

$' !%)' $' &8&8. (#'&' # !&' * !% &[' 8&8' . ("#/' # ! *' .&$ / !!&#

%

QFA<'7 F '' KBF= = UC4B>43F35 ' 4@>4' 7C>B7' F '' BF= = 3443CV' = 7C' 4F' 7 .'3A7 ' K) >' ' C* %+(' + ' '333 ' % +' C<' ?BFAC' 4@73A' 6AFU<7?4' MA>L7?' 4@73A' ?47AC' 7C>B7?1\ $ ' '>B7?R' %*) : ' * $ $ $$$ ' %, ' ' = 7C>B7' >&FC7 Q34@FU4' >' BFC?7YU7C4' 3CBFCL7C37CB7 ' = >87?' CF4' 4@7' 3CHUAI ' + ' # ' %, '3L ' 3 ' @>4' = 7>C?'4@3?' = 7C>B7Z')9/6 ! & ' B * ' + ' ;% 5 ' 3 ' 3K ' %)' @7' '37ABZ7 = 7] C>B7' Q>?' <7&3L7A7<'> = 3<?4' 'AFQC3CV' VAFU6?' F ' ' CFM&7? = ' #V7C7A>&3E7<' : +&\? @7' >B43FC' $4@A7>47C3CV ' %3 , , * ' * ' ,*+ ' <A7<3?' = >C>?FA'4A7?U= ' BKV F 1 # %' J & ' ;% 5') ' 6FA7' = >C' $73 BFC?4A7 I C7C' 4F' ?ICC7' M4' = >C>?')'3 + D ' O # ' ' '@* $ ' ; 7ABI' FB 5 ' '?4UA<I' B@>= 63FC ' 3?' ?Q7A<'U6A7AI<'6AFU<&I' V>L7' = >.' C>B7 ' BE++*3C' : % -- HB' (!2#2AA#/(&Z2 ; UA477?5, + ' 1 = FCI' F4@7A' Q3A<3?'F '' = 7CI ?' * ' %G ' 2'F* ' ++)' 34@FU43C' = 7.' C>CB7' $ &7V3>CB7 ' 6&7?>CB7?R ')7 ; 9' & ' ' 'G' ? ' ' ! '+' ><' 4@>I' = >3<' F '' = >CC>B7' FCI' = ICA3CV ')69E < ') 'B' %' ;%) 5 ' %%' @7' LF3B7' F '' = 7C>B7' >C<' BF= 6&>3C4' Q>?' ?3&7C4 ' ' ?? ' %% ' % %' ' 3C' @7' >AB@???' 67A?3?47<' > 3C' >BBU?>&3FC' >C<' = 7C>B7 ')96-' < * ' ' ' L333 ' :' ' +**' @7' CV&3?@' '&774 Q>?' BAU3?3CV' M I' Q>I' F '' = 7C>B7' F '' 4@7' 6>C3?@' BF>?4

Ĥ' ' % ' *' $%& ' 2 ' +) ' % ' ' *4' $ '%) '

%'% ' + * ' , %*' C' V>CV ' 3C' B@7A7 ' 3C' BFC47C>CB7 ' 6>4' ' 4F' = 7C' @>' = >C' = >C>B7 ' % * ' & ' +#))+' @>3 VA7 4' = >C?7?43&@3=' = >4?' =%= - X * ' ' && @&A' = F<7' B@>UCV7<7 ' C<' = >C' = IB@7' = >C>B7' Q34@' = 7AL>I&&FU?' QFA<7E' +* ' F * ' 2 F%G ' ' C<' = >8@3=' C>' = >C>CB7 ' MF4' >&' = 7?FUA7 ') + 4 ' * $ + ') + ' @FUV@'@7' >C<' @3?' BUA?4' BA7Q' ! 73AB7' ?3VC7' F '' M>44>3&' = >87' >C<' = 7C>B7' @3V@

, !! ''. : !&, ' ! ''' 8 & + #(7 (/&#!+

)')*6-' & ' C* '3' = 74'3L '*; >=M' 5' @7' >V7' C7'4@7' = >C7???'F '' 5' 777' BF= = F7UICV7'FA'B@>?3CV7'L6Q>A<' @7747 ')/+6' # 'B ' ! ' + ' @7'<>A8' 7C>B7'F ''4@7' <3?4>C4' >A' 2*' - ' %' ' '' % ?' 3&4' 4@FU AC'M>B8''AF=' ?@><FQ I' = 7C>B7?'F ''?@><FQ?Z')9-)'C ' C %' ! '3' ' IFC<7A' 'AFQC3CV' B&FU<'U&'3&7FC7' @>&'' U4'3&?' = 7 C>B7' F ''4@7' ?8377 = C>B7' F ''4@7' ?8377 BF= = F7UICV7'FA'B@>?3CV7'L6Q>A<' @7747 ')/+6' # 'B ' ! ' + ' @7'<>A8' 7C>B7'F ''4@7' <3?4>C4' >A' 2*' - ' %' ' '' % ?' 3&4' 4@FU AC'M>B8''AF=' ?@><FQ I' = 7C>B7?'F ''?@><FQ?Z')9-)'C ' C %' ! '3' ' IFC<7A' 'AFQC3CV' B&FU<'U&'3&7FC7' @>&'' U4'3&?' = 7 C>B7?') 96)' ' ' @* $ '%' @7' ?U<<7C' Q>A'>C<' = 7C>B7' F ''4@7' ?8377

& ' (" ' $(' +!(!& $!%'#/+' &!' ' *%"'%!% &(!&#+ , (#/& ' ' (!(+! %& % * < % ,' ,8 ' 4'Q>?'>C'3C?U&4' 4F'4@7'A76UM&3B>C?' '34' Q>?' >' = 7C>B7' 4F' 4@7' >A3?4FBA>BI'F'' UA3C ' % *+' < * ' = Z ,B 5' @7'F&<?FB>3&' <3?B = 47C4 'A7 = >3C7<' >'67A674U>&' = 7C>B7' 4F' 6UM&3B' FA<7A

& : (' &' 8+' %' ,' 8(F #)+'%&-') 8()#)++&' ;FR' 8#((+N+I&' 8(F &++&' ;F6 8(#(+N+I&' 8("8(++&' ;-V 8(#(& ;FR' 8("'(+'&'](i.&' 8&(!!((.&'R' 8(#& &'R-6 8(#(++%&' F)++%&' 6)W 8(#&4N4I&' F"+N+I6' M"+'%&' -)+&' F)++)'%&-' #"(###&+&' F + %&' 8"] #"++&' 8)#('&' NA> '%"&$7)') 8&#(++&' 8"F #(&' F(+&' 8)#E' 8"#(++ ' RF' 8 #(&' '* ' (#, ') ' , 8 D"N#I -"A&' 8 (#(#&& ' F(: .&' F(: #+& F(: #D& ' Z(' $ -%) ' N"7!%' '] (7+' $%') 0)& ' $%' % ' N (, "#/! #I' +# '$ '% % ' '2%4$ '%5%' / ' B$ %B% ' ! ' $ '%)) % ' W :7(' B$ ' !) % B' $ ' $ ' !%'

'$' %' ' ':!!&' ' % 7,' :!' 8&#('&+ (/('"#+!' ! ' !% &(!&#

0 ^ ' 1 ' / ' LG! ' ' ') % I ''&$FU >CI' Q>C' = >C>???6 AV@' 'FAB7' F4' 6FQ7A' R$>4 5$FU @>??? '%' +' 2 ' ' @ % ' KKL33 ' KF F<' = >C>UC?3<' M>3AC' Q34@' @7&&

>C<' &3K>M74@' @3?' QI'7 '@>L7' 4@4B 7<(' >C<' = >C 7?<4@7' 7C> C47?' 0 ' * ' ' KKL33 ' + @7??7' 3C'3<7&?' ?FA7' <I<' = >CI??@7' @A&?47C<F = 7 ' ; + ' C+ ' ' ' ' ' ;% *5 +% FC4A>3A' 4@7' Q3&&' F'' 4@7' Q>B@7' = >C3?>C<' >C<' MF3?4>C<' 4@>3= ') 9*: ' # $ -' ' *' ' = ' $ 8?' % *+' ' +' @7' MF&<7?4 A7787' @>4' 7U7A' C3>C>B(' AFI ')6*+' ' @* BB $ >C ' 2>2 @7C' @7' 3?' BF = 67&&<' FA' = 7C>B[<' 3C4F' >CI' F63C3FC' 4@>4' @7' <F7?' CF4' A7><3&I' BFCB73L7' K(' 4 & #' ' % % $;% %5 $;' +' 7A' ?UMH7B4?' Q7A7' 3CB347<' 4F' A7M7&&3FC' # @7A' &3'7' Q>?' = 7>?UA7<' K +D' : ' C% ' ' +! ' KL33 ' - 7>A' = 7 '@7' A76&37<' = 7C>B3CV' @7A' Q34@' @3?' @>C<'

' (", $"8 & + #(7 (/&#!+

- **' 0 '4 ' ; ' + ' FQ' MD4' 7&<7' = >C>B7<' = 7' %+ ' ? ' % *' *' FQ' 4@7' 'FUA7' 7&7 = 7C47?' = 7C>B7' >&&7' = 7C' 4@>4' PB4B 53; ') ' $' 3L ' %* ' FUA' 717?' <F' = 7C>B7' = 7Z Q@I'&FF87' IFU' 6>&7'^ %'% + ' ' 28' $ ' 8?'B C*' 3V@' QFF<?' Q@F?7' = FUC4] 3CV' 4F6?' = 7C>B7' 4@7' ?6@7A7?' * & ; ' ' ' @7??7' 7L3&?' >A7' VA7>4 FFC7A' FA' &>47A' 4@7I' = >I' = 7C>B7' 4@7' C>&3FC'34?7&' ' % + ' 4 & #' ' C/ 'B C '72' 'C7Q' >C<' 'FA = 3<>M&7' <>CV7A' = 7C>B7<' 4@7' Q7?47AC' 'AFC437A' - ' ' #+!' 3C' ' !

)'3B5B *' '*-' !%,'% '3C' ' '@ ';% ,5 % *' 73' MFU' QF?4' 6>4' <7M'M>M' = >C>?4'M74F'<37' +, ' * '] @% ' + 0,'P @7I'R'@7 = ' AF>C7?@U<' 4F' M77' <7<7'3 ''4@7I' = >&7' (I ' A7?3?47CB7 ' %'%+ ' ?' ! ' %' -* + ' ;%) 5 %% ' @7 3' 4F87' MI = '>C<' = 7C>B7<' MI = '4F' ?4FC7' MI = 'LC4F' <74@7

4 ' ' ' :!!&' 8&#('&+' ! ' .& !% &(!&#"#/')' (' & ' * '] J %) ' ; F4&?5 ' ' F' &FCV7' @7' = >C>?7<('M--44' 447&>?47'4F.VI<7A7'M7I' = 74' + ' '@* $ '; 7ABI' FB 5 % ' ' = >C'3?' = 7787' >CF4M3A'<F4@' = >C>B7# % K ' & ' B ' '33' 3L ' *+' ! UA4@4' <A>Q3>' @>&<3?' 4@3?'?UM47&&' @FA?' F ''4A77' C<' = >CI?>C<' ?4AI<3?' 4@AFQ' 4@7' = I<' B37437 ' +> ' : ' : + ' '3 '333 ' **' @F'7U7A'8C7Q' 4@7' 7>U7C?' = 7C>B7'?F'Z %'%+ ' # 3' %6 '@, &% ' @ * ' '[Q>?' 7>4@' 4F' VF' >Q>I ' C<' 4@7' F<' = 7C>B'<' 3''@7' <>A[<'4F'?4>I ')66-' & : ' / $ ' %3 ' 7&' 8? % ' >A4@' M7&FQ' ?CFF&#' @7>L7C' >MFL7' = 7C>B7<' K (' 3 ' ' (' ' K33' 3' 4' Q>?' 3<&7' 4F' = 7C>B7' Q@3&7' @7' Q>?' UC>M&7' 4F' ?4A387

' <$' ' '% 7,' :!' (+' (' :#"+%8&#!-' &#(?!) -' ', (#/& ' ' ! ' !% &(!&#! ' "#$"'' !'

%'% + ' '@ % ' AF&' ' FQ' ' ' ' QIB8I<')' *' j B' % ' ' KK ' 2 ' / 4' %

6>=7' = >C7?>6<' <7<' 3C' M>4' 6&>B7' +L2 ' 4 ' ,%* G' 8?' @6RH@' F<' I 1 = >C>???3C' LC4F' 4@7=')E' 6>3C7?' F '' @7&' >V+' ' # ' ! (' 'L' B >2><' UB@' ' = 7C>B7' Q>(7' %*(' 4 ' $ F * D' 2 ' @73A' 717?>C<' 4@73A' MA>C<3?@3CV' 'FA8?<' 4FCVU7?' ' = 7C>B7?' 4/ R ' >' @FA3<' <7>4@' 22) *' F**!. ' +!,' ! ' ;7<' +5f % +' @7' B@37''?I = 64F = ?' = 7C>B3CV>MFA43FC' >A7' 4A>C?34FAI' 6>3C?' 3C' 4@7' M>B8' FA' P74B R')97-' 4 ' % ' 'L33 ' 333 ' ;%)+5 ' % *' F' 4@A7>47C7<' 7KBF = = UC3B>43FC' 3?' CFQ' = 7C>B7<' . ' * '!%' '-' ') %+ .0&' !

* ') ' B' % ' 3J ' K ' 4' 2' 7 = >C7?44' @3A7' 4F' M74' G' MIC<(' .)'%+K,' ' @ ') ' 2 2 4@3' ??&'' = >C>?74@' M3 ??&''' FA'4F'<I7' %) ' % ' % ' 8 ' ?'L' '+' *' F' = >C>77'4@>4'@7'Q3&&' M4ICV'@3=' M7'FA7'>'3U<V7' %), 'L & ' ':*' % ' 3' M' A7>4' ?@UA' = &C>B7?' Q34@' Q@3&' 3C' @>C<' F' 7C47A>3C7' 4@77' ;Q7&BF = 75' 4F' @3?' &>C<' %) ; 0 $' % ' 2' @7' 3U7A' IM7A F'47C' >C>???4@' 4F' <AFQC7' 4@7' Q@F4?' >C?3FC?' ' 4 $') ' ! ' *''*' @7' ?F&34>AI'<3???C437C4' Q>?' = 7C>B3CV' 4F' &7>L7' 4@7' = 77&3CV.@FU?7'

$ ' :+&!% &(!&#"#/7)' 6 % ^^B

+' 4 ' &*' ' 2' QFA<?' >C<' 3?4F&?' BFB84' >C<' = 7C>B<' 3C' 4@7' @>C<?F'>MFU4' 4@A7?' @UC<A7<' ' U''3>C?

&#'& &8(' &(.7& % ' ' (.7& $.&"#/ :!' *# .)' !% &(!+' &2 9"('& ' % ' !% &(!&#"#/' &E#(&&8&#!' 8&#('"#/' !% &(!&#"#/' 1#('& ' #& *% ' 8&#('&+ ' !% &(!&## %)K ' G JJ/.' 3C' 7' ;%)*,5+%)' @3B@' '7 = 3C3C7' = 7C>B7.' = 7C4' <3<' CF' <FUM4' UCB347' @3 = '4F' <F' 34 ' *2 ' ' ' ' '

+ * 'KF * 4' ' @74@7A'34' Q>?'M I' 7V&3V7CB7'3C' VU>A<] 3C'V' 4@7= ' FA'4@>4'4@7I'4@FUV@4'4@7' !7&&FQ?' BFU&<' CF4' = 7C<' 4@7 = 77&L7?' ' 8CFQ'CF4' MU4' FC7' F'' 4@7 = ' AUC' >Q>! ' 3 , G' & : ':B ' ; ';7<', 5 + ' FQ'734@7A' @7' FA' Q7' ?@FU&<' M7' = UB@' = 7C<7<' M I '34 ' 'B>CCF4'3 = >V3C7 ' % *)' + ' ' ' % &' 7A '%% % ' ' ' @7' <U<<7C4'8CFQ'Q@>4'Q>! 4F' V>CV'4F' = 7C<' @3?..7?&' @7' @7<' 4F' VAUM' >Q>I ' 'A>'&77 4' 4F' <>A8' 'FA'>' B>CC I'&>>@ ! . ') ' $"!' (,=(#!(/& N(' & + #!' %6 * ' ! ' (=("7' N # #&/ (!"=& (#,' "#!& /(!"=& ' #!&9!+ I +* ' * ' (' F % G ' A63 4' = > I ' CFB@4' = 7C<' 4@7' >C7' = 147' 4F' = >8 '34' ?F' 47UV@ ')',+*9 % ' -' * B %) ' 7 ' ?>Q'4@>3A' Q>?' C>' = 738C7?' CFA' = 7?UA7' = 3B@4' = 7C<') ',) ' ' @* $ ' ; 5' KK ', ' '">&&' 4@ I ' QF' >C<' B>3A' 4' = 7C<?' 4@7' CF-' 4F' = 7C7 ' % *>' % '@* $ ' -* $ ' KKK ' , ,)' ^U@>4' Q3&&' 34' = 7C<' 4F' = UAC7'4@ I ' ?7C??' FU4' ! ' '"8 =&N(& + #!' %)+"' (77) ' ?= 5* ' ' N $ ' ('%"7, I' ! ' !% "=&N'$' >A' . I ' 6 %' *) ' 3% ' ! '+)+' U4@3A7' = 747'@>?' = 7C<&<' 5$7 'U&&' = 783 ' A'>C7'@>?'?4F&&7C'3C' = I'?47<7 ')'2 ' + ' '% ' 7&U?IC7' @>< ' ?F' VA747' B>A7' 'FA' @7A' B@3&<A7C' 4@>4' 4@7 I' = 7C<7<' G' VA7Q7' ?F' Q7&' 4@>4' 7U7A I' FC7' 4@>4' ?>Q' 4@7 = ' 7'?>Q' 4@7 = ' = 7AU>I &&7<' .9) ;' 'C ' 6 * $ ' ' ' &&' @UC4'4@7' F447A>C[4@7'MAFB8 ' C[6U[4@7' &3 = 674' >' ''4@7' AFB8 ' F' M>447C' >C[4F' = 7C<' I7 ! ' '"8 =&.)'(,,"!" #+ * (/&+' ''&+I')',++ '@* ' ' +' '@* $ ',*,' I >&?'3U<>?' 4F' = 7C<I C'@I?6UA?' F' <7<' @>4@' @ I = ' ?F&<')',+* ' * ';% %,5))' @7' = >A87'4' @7' ?F' = 7C<7<' = >C I ' F&<7 ' , ' 3 %) ' ! ' ;% ++5 ' , @>3' ?>3&' B>U?' @3 = ' M7' 6>34' I 7A&37' F'' 47C7' 6UC<3? ' YU@3&&' 4M>&' M7' F'' 6U I ?B@>CB7' 4F' = 7C<' @3 = ' @3?' '77 ' , (& 6+ ' ; ,5 ' '' @3?' &3C3CV M7'4FF'3344&7 ' 4@7C' FUV@4' 4@7' B@UAB@' 4F' = 7C<' 34 ' ,) ' ' , ' C ' 3L ' +' C<' Q7' Q3&&' = 7C<' 4@ I ' Q>V7?<' ,) (' # ' B ' F * '3L ' ,)' F = 74 3 = 7?' Q@347' 3&&37?' <3<' 4@73A' 7>L7?' >' ''FA<' 34@'Q@F&?F=' F661.'&FQ A?' 4F' = 7C<' @3?' @F = 7&I' ' F>A< M. ' ' '3 = 6AFL7' 3C' > = FUC4' '6A3B7 ' K)F>' 1 ' !' @ ' + ' :- ' @* $ ' ,* ' !

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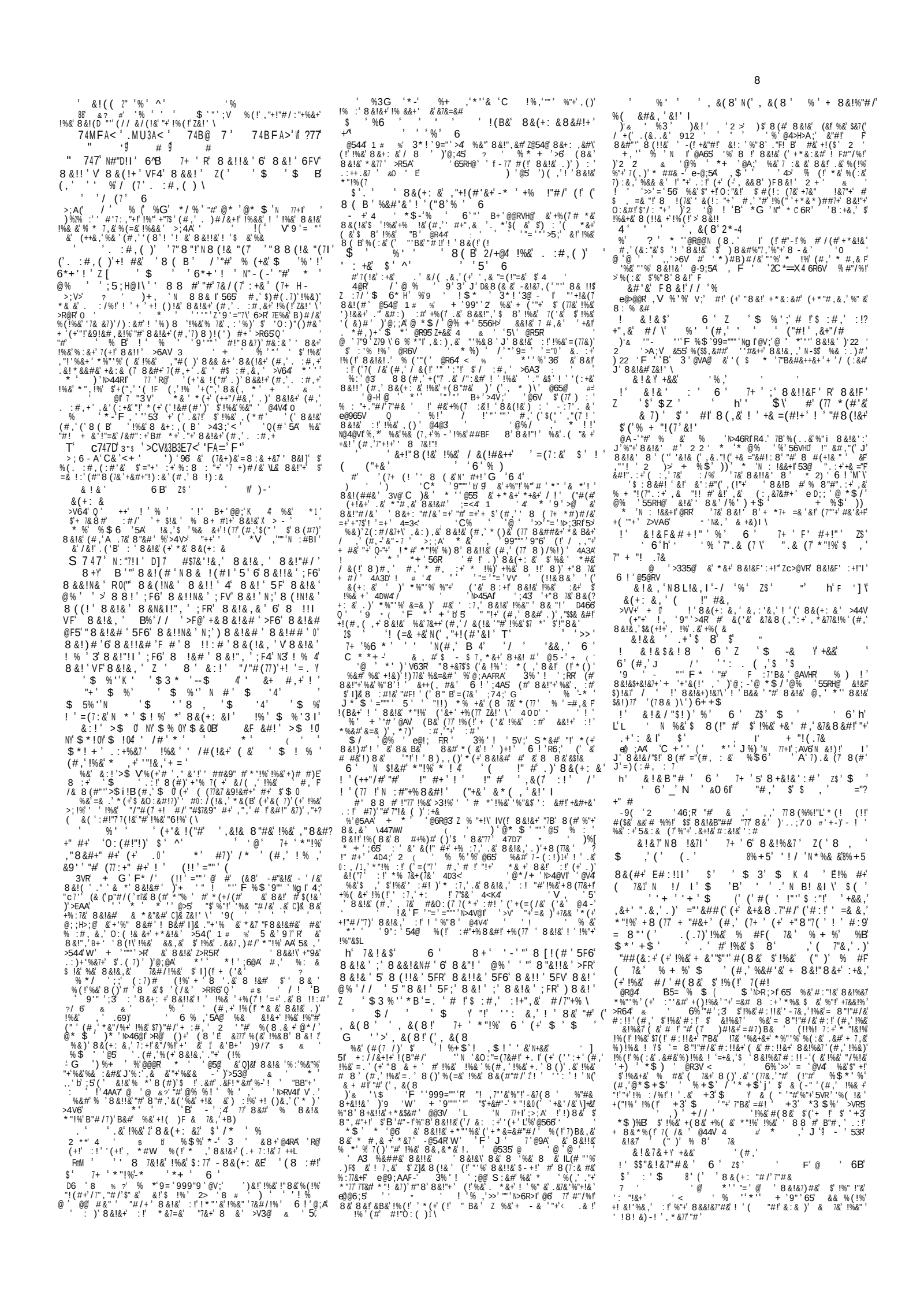

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&('%'  !%&'"#'(#  !%&'  7"!&W(7?  $':+'*%'7=&,"#'!%'+
   &!&8  +)'%  +"D&'  N8&!&8  +"B  :F+  "DI'
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   &!&#+  8(!+"+'N8&!&#+(8(!,#F+"+I'  7+'
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'  %!'+'-'  *0  'N>44A!'>'  "#&'7&!'8&'"#'!%&8'
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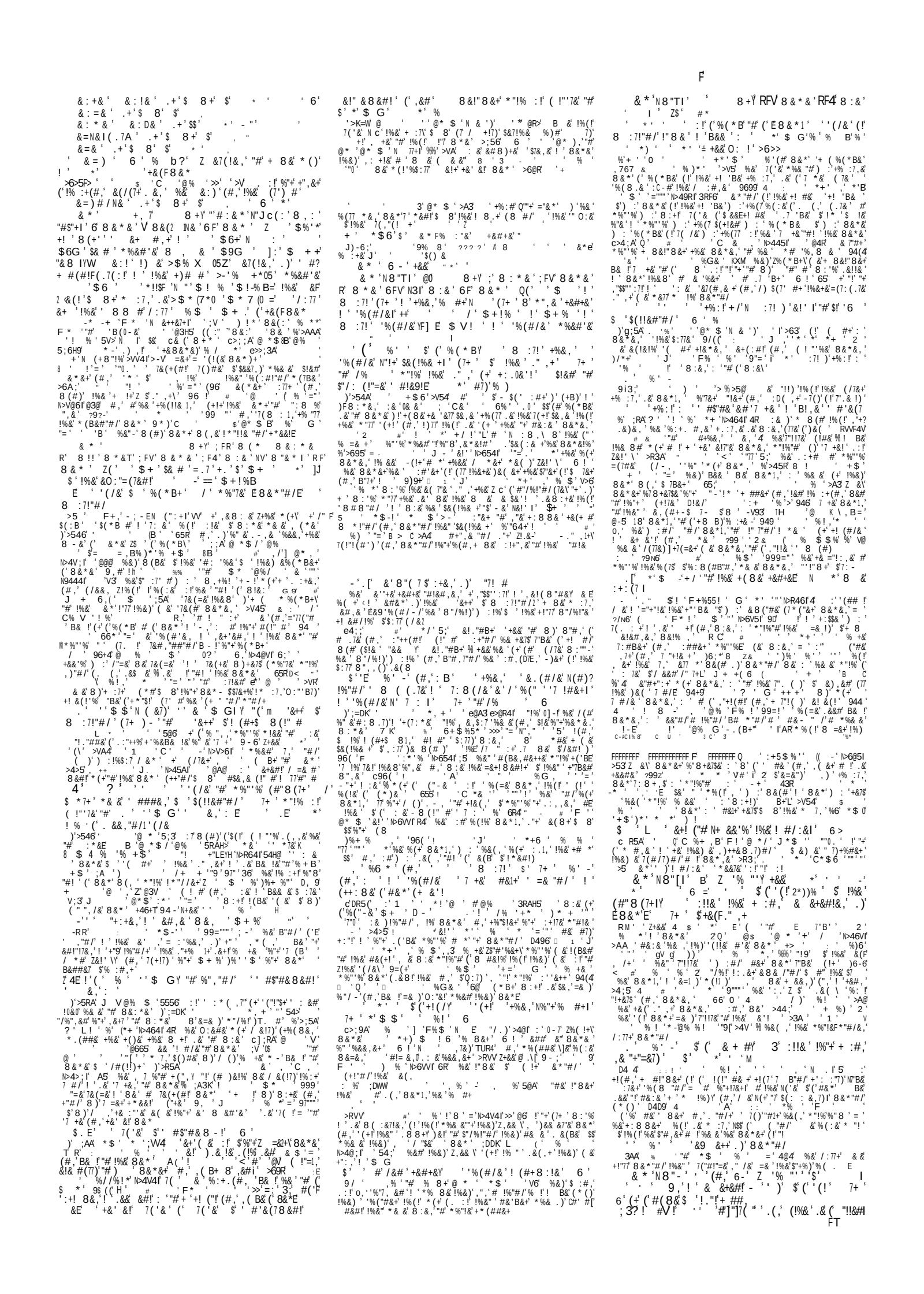

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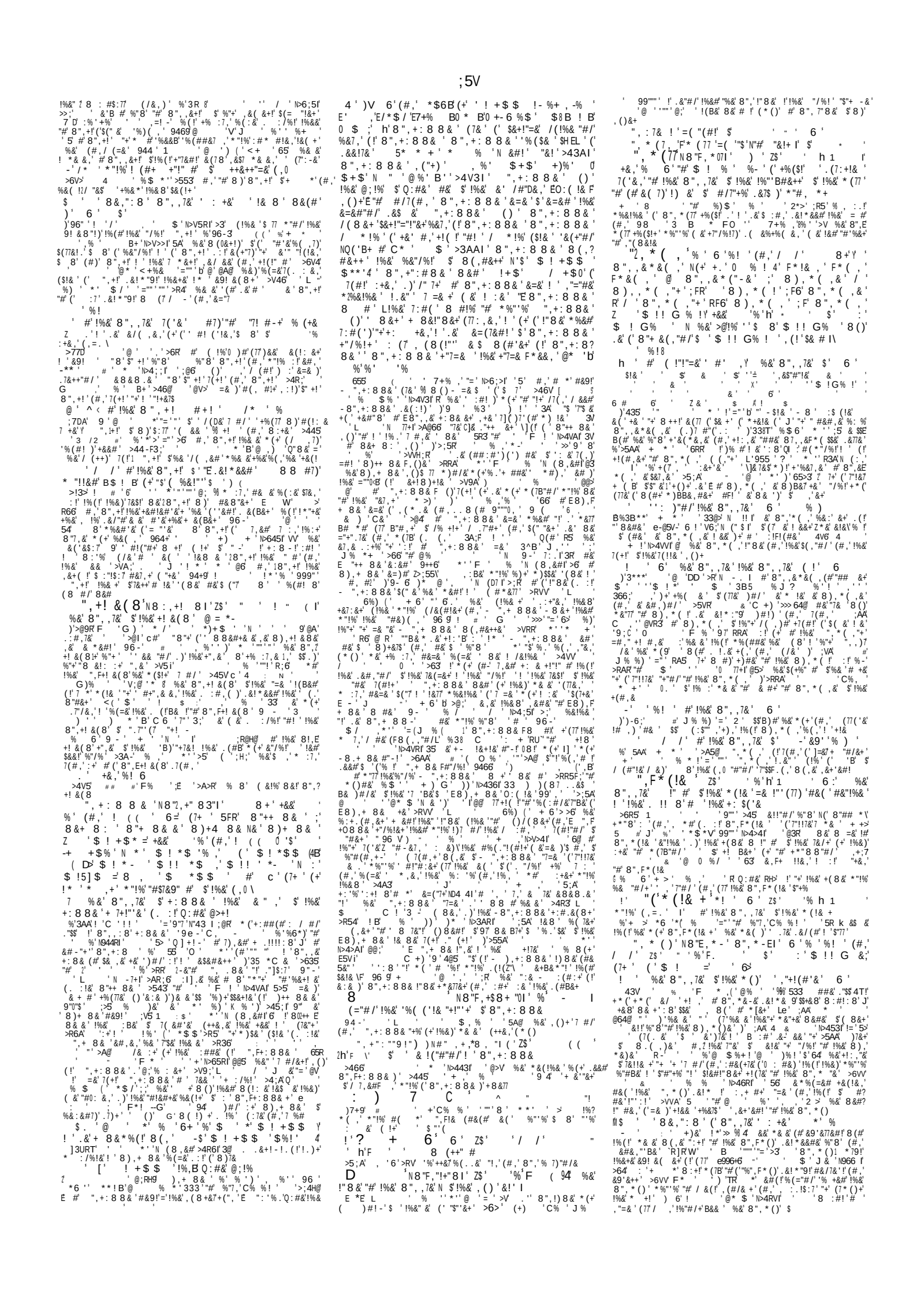

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Q34@' ?U?63B3FC# 'FA' ?UB@' >?' > = >???' >&# A7&>43FC? ' = U?4' 7AA7' 3C' ?F=7' %*K%6 : ' % %) ' ;%* *5 ' 4?B ' 3 ' ' FA'FUV@4' 4@7' 34&7' F ''>' 3?B7&>C7FU?' A347A'4F'M7' <7C I <' = 7 ' FC' 4@7' >BBFUC4' 4@>4' ' @>L7' VAFUC<7<' = I' 3?-' B7&>CI ?' U6FC' >' B7A?>3C' 74' F '' A7>43???' >&A7><' I' 6UM&3?@ < ' 1>>' / o' 'F $ %' , B' 74B ' ;%** 5 ' ' ?' 47B@C3B>&' 47A = ?' Q3&&' M7' UC>LF3<>M&7' 3C' 4@3?' <7?BA3643FC ' ' >< L3??' = I' = ?3B7&&>C7FU?' A7>< 7A?' 4F' 6>??' 34FL7A (' % %' 1 s ' @ * ' J & ' ;% *)5 ' % ' 'VA7>4' 4@7>4&3B>&' QA347A' ' >C<' = 3?. ' B7&&>C7FU?' 4F' 4@>4' <7VA77 '4@>4' 4@7A7' Q>?' ?F = 74@3CV' 'FA'>&&' B&>???' F ''A7><7A?' % ' . %+' , / * ' '%' L3' AF??7' 8?' %)' ' + ' @7' ">AFC' F'' F@7C'7&?' Q>?' A>4@7A' >' = 3?] B7&&>C7FU?' IFU4@ 'A>4@7A' >'UC3L7A?>&' V7C3U?

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+ ' # ' 3C' $ ' *! *'' B C ,' > ' I' 4@3A<' P&7447AR' Q3&&' M7' BFCL717<' MI' >= ' 4@7' = 3?B7&&>C3?4 ' + > ' ! ' ' ' ' ! +' @ ' ' ' ' &>47' = 3?B7&&>C3?4' = FA7' B7&7MA>47<' 'FA' L7A?>&3&34 I' >C<' ??&' .BFC'3<7CB7'4@>C' 'FA' 7K>B4] C7??') 99+' & #' ' ' ' 'B C 2 ' 7' = >I' ' BFC?3<7A' @3=' P 73V@' UC4R' '3A?4' >?' > ' 6F74' ??BFC<&I' >?' >' BA343B ' >C<' 4@3A<&I' >?' >' = 3?B7&&>C3?4.'

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6 ! 'K' ' 3?B7&&>CI' F'' @A3?43>C?' >C<' UA8?' 4FV74@7A' % ' O # ' ' '+' ' ;7<',5 ', *' UAC' IFUA' 7I7?' CFQ'4F' 4@7' U&4A>' ><3B>&?' Q@>4' >' = F4&7I 'BFC'U?7<' H>AA3CV ' = 3?B7&&>CI' F'' 3AA7BFCB3&>M&7' 4@7FA3?4?' $ % +*' # @ ') 'L' % ' F4'&387' 4@7'637M>&<' = 3?B7&&>CI ' = >C' ' UA?4?' F''VA7>4' @7>A4' >C<' ?3&6?' 3C' ?7C?U>&' = 3A7 ' + > ' % ' '3L ' C<7A'4@>4 '4@7' = 3?B7&&>CI'M7V>C O>'YU><4>C4' >' 43C' B>C3B3C'>C' F&<' 6>C3?@' Q>4B@' >C<' ?F = 7' F4@7A' 4A3C874?' F''&344&7' L>&U7

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% K' '1 $ ' / 4' @7' 3?B7&&>C37 'FA'>' 7V3?4A37 ' >C<' 74@F<3B>&&' 3A7B4FA37' F'' A3EFC?' %'E)>)' ' ' *' C/' ' , 8?' % ' ' %' @3?' M>4@' 6U4' = 7' 3C4F' 4@7??' = 3?B7&&>C37?(' Q@3B@' ' 6UA6F?7' 4F' ?U66A7??' 3'' F<' V3L7' = 7' &7>L7' 4F' QA347' >' HU?4' >C<' 67A'7B4' LF&U = 7' F'(6@3&F?F6@ I' ?/T+' '0 % '2 B' ALM@3C'FA' 3?B7&&>C37?' @A3?4>C' >C<' U<>3B>&3') /69' 3 ' ' ') ;%) 5 A7' ' % F' IFU' ' @U = M&I' 6A7?7C4' 4@3?' F&&7B43FC' F'' 3?B7&&>C37?' 'FA' 4@7' 7C47A4>3C = 7C4' F'' IFUA' &37?UA7' @FUA?' + ' P?77' 4 V &',R')6*" $ % ' '@*' , % ' C<' Q@7C' 4@7 I' HF3C' 4@73A' 67A3BA>=7?' U4' ? 6?'>'MFF8' F'' 3?B7&&>C37?

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% ' ' % '33',),' @7' &BFA>C' 3?:'=3?B7&&>CI' F'' F4@7A' 6AF<3V3FU?' 4@3CV?' ?9 ' ' ' ' ! ' F' <A' FC<7A'CF4' FUA47FU?' S7(7A'>'4'447' M7>A>CB7' F'' 4@3?' 7>A&I' FA' A>4@7A' UC43=7&I' 'AU34#' >' 3?B7&>CI' FC&I' 3C47C<7<' 'FA' FUA' FQC' 6A3L>47' U?7' 3)BB %) *'' / %-!' K333 ' @F?7' FC&I' 6UA3=>?7' 7L7A&3L3CV' !>=7' @'>4' 3C' = I' 3??&>CI' 6&>C4' U373A' >=7' &IBQ' 2- (4' @7' FC4@&I' 3?B7&&>CI\' FA' 7=F3A?' 'FA' 4@7' UA3FU?' * % $ -* ' * '' ;K >K5' ' 7 QAF471 @7' 3'7' F'' @7IC7&[' 3C' 4@7' = 3?B7&&>CI'B>&I7<' 1 @7' 4U<7C4' K(K' ! ' ' % *' @>4' >667>A?' 4F' = 7>C' 7AAFA' 3C' IFUA' 4AU&I' L>&U>M&7' 3?B7&&>CI' + ' ' 4 ' 2 4' C' &<' CV&3?@' 3?] B7&&>CI' ' ' ' ' C 6 '3L' ;% *5 %) @7' "3M&7' C' >B4 '3?' >'I [O>'L7AI' L>A3FU?'FC7 ' ' / ' & + #+' $'=(" :+' '7(++&+' -% ' % + ' # ' UV ' "&UC4' % (' % %-' C 4' %)' "&>B8VU>A<?' 3= 6AF67A' '7 = >&7?' >C<' =3?B7 ' &>C37?' ?>3C<47A7<' ! ' "+' A77(\") 3' (' 6 ' Z(,' ' $) ! ' (+ Y !%&' $ 8' & %' +: / /&+!&,' .)' &' ' +.' N :!' '$' $ * $ ' % ,4(" ^' 0+ '

Q'C%)*' (' % 'G ' /% ·' * ' ' 747A>C7' A=I ' BF=] 6FUC<7<' F'' 3?B7&&>CI' !FAB7?' F''>&& ' >43FC?' %)-'2 4' 7A4>3C7' 3?B7&&>6I' FA8?' F'' @7' 3V@4' FCFLA>M&7' !A>CB3?' H 7 7AU&>= ')9W)' ' @* $ ' 2>' @7

3???&>CI' >4IA' >C<' 4@7' !>QC' %) ' ' ' !' ;% 5' ' ' I' 4@73A' A>3?B7&&>CI'<73437?>4' F = 7 '4@7'I'?@FQ7<' CF' C>43FC' Q>?' Q34@FU4' 34?' F<' %) +' K 4' 3?B7&&>CI' F7 = ?' FC4>3C3CV' >' 7 A>C?&>43FC' F'' 3AV3&&?' B&FVU7?' L3<[?' FL7' &7V37?' P74B$&' % * (') + ' @* ' * ' % ' C4AF< ')) 9 $ @>L7' A7>< ' >&& 4@7' = 3?B7&&>CI' F7 = ?'4@>4' @>L7' M77C' 6UM&3?@7<' 'FA'4Q7C4I' 7>A?' 6>?4 ' *) ' 4 'C+') ' ;% , 5' $ % ' 3?B7&&>CI'4@FUV@4?' U6FC' ?7L7A>&' ?UMH7B4?'

$' "+' &77&#) ' 6' % b =' Z 7!& (!" #' $' $) ' ' '@-[($!& ' $) %', =' R' 'D' %*+ '4A' * +$ %' 33 ' K3' 4' 3?' 6AF67A' 4F' ?FQ' = 3?B7&&7CI' FA'M>A&7 I''F<<7A'2*3 '-% % ' $ 4' 3C' >'6&>B7'4@>4'3?'6&FQ7<' >C<' ?FQC' 7L7AI' I7>A

"+' &77"#& ' &(,"#/' "#' 8 , ' &, , ' $' Q #+ #E+' * /*' '$ ' $! ' '2 ' '@,' I' 77"+' &77"# / ' .+' $ 8' $' ' "+' &7! ' F! * ' .+' $ 8+' $' ' ! ' "+' &E#+: &"' 6' Z "+F ; \' #/$:7' ' :#, &+& =&, ' '&##+: & %)K ' */' F+ % ' %' 3C' % ') ' ; >&@ 5' ' %*%' && = (C[?' >B43FC?' >A7' ?UMH7B4' 4F' = 3?B7C?UA7' %)+' 1 ' @%) ' %*' ' 77 7CA7?67B4' >I' B>U?7' = 3?27C?UA7?' 4F' M7' B>?4' U(FC' @7' UM43B7' U?43B7' %'%) +' O ' * $ ' D@ '&3')' ;%) 5 ,9,' @7I' B>?4' @3=' PHB' @A3?4R' >Q>I' MI' <&73A' 3C3?B7C?UA7?' >C<' A76AF>B@7?' 6U4' U6FC' @3=

I' "+' &2 +! L& ' (?' Z "+F7' " \' %' B*' '&##+: U* #/$:77)' ' :#, &+& =&, 7)

+>++' # ' +! ')+' '@F67'4@7' B>C<3<' A7>< 7A' Q3&&' CF4' = 3?B7C?UA7' = 7' FA' 3C?7A43CV' 4@3?' 3C4F' = I' FM?7AU>43FC?' %)+' 1 ' ('@%) ' %*' '?7 7C A7?67B4' >I' B>U?7' = 3?27C?UA7?' 4F' M7' B>?4' U(FC' @7' UM43B7' U?43B7' %'%) +' O ' * $ ' D@ '&3')' ;%) 5 ,9,' @7I' B>?4' @3=' PHB' @A3?4R' >Q>I' MI' <&73A' 3C3?B7C?UA7?' >C<' A76AF>B@7?' 6U4' U6FC' @3=

I' "+' &2 +! L& ' (?' Z "+F7' " \' %' B*' '&##+: U* #/$:77)' ' :#, &+& =&, 7)

%) *' ' $ ' A7' ' ;%) *+5 c ' ,'M' F' 6A7L7C4' ;3" ' BFU&<5' 4@7' = 3?.B7C?UA3CV' F'' 4@7?7?' 7A= FC? ' ' ' '

RA ;

"+ ' &2, "! ' Z "+F>V \' "+.&7"&$
%) ' $ ' 3C' !U&87' @ ' K3' & 3M' @7A7' <>A7'
CF C=C' >''3A=7'4@>&'4@7'<FB4A3C7'F'' UAV>4FAI'3?'@FUA4'U&&'
4F' L7A4UFU?' &3'7' 4@7' FC&!' = 3?BA7<344' Q@7A7F'' @>4@' L447A&I'
M>C3?@7<'>&' VFF<' @A3?43>C'BFC<3B3FC?
"+ ' "L6E, "! ' 'Z "+F"' V \' %' ' ', "+. &7"&=&
1 ',6 ' 3*-- ' B' J ' '; >A87A' FB 5' %' '
B>C' CF&' F4@7AQ3??' <F' 3C' M7&37L3CV' 4@7 = ' MU&' = 3?C7<7<34' 4@77 '
%) ' ' 4A' C% !) ' ' A7'! ' F'
=3?BA7<34' 4@7'67A'7B4'M7@>U3FUA' F''FUA'6A3=443U7'B@UAB@'>C<'
4@7' = 3A>B&7??QAFUV@4'4@7A73C ' 4) >" */ (@3 - B'
''4@FU' Q3&4' CF4'6A(U<3B7'4@367 FQC' @>A34IMI'A63?BA7<343CV'
=7' ' b '
Q $$"+ ' 6E , "!6 , 3 - 0@5 "+. &7"&=&, '
% *' ' ' ' ' L3A' L33' 5V@' @7' = 3?BA7<347<'
Q7&L7'@>?47C'M>B8'4F'4@7' @<47>U''FA'>C'!2<?Q7A'3C'Q43'3CV['
"+ ' & &E , Z > F ; \' '8"+!(B&#' &&, '
>3 >K' N ' *' ' '*'' @(% ' '43' 8?' ;% +5'+%' @I'
4@7C'?@FU&<' = >C ' 6F3&'@3?' ?>&L>43FC' FA'>''37ABT' = 3? A77<Z
% ,>'! ' % ' AF&'%)' IA>CCI'Q@3B@'>A=?' <L7A??'
j=3?BA77<?' F'?4>=6' 6FC'4@7'C>=7'F''!A77<F=
!' "+ ' 2B&, ' ' 6 % b?' - & ' 6 \'
&#!'(*) ', &$ 8&,
% ' C% :+' @' L3'K' ; F&7=>B@7' 5'
@7' ?4A7BB@7M'FU47'@3?'&I=3?'4F'8767' 67'B@3&<7' @7'M7'
CF4'<7'>B&4'Q34@' = 3?BAF83<' &I=7?
"+ ' 1 $' % ' Z "+F"" \' % ' ' '+ *'
N(' $"&7, I' *"!%' (' ' ' :!' $' !(!" #' 7+ '%6 *
% ++' ' ! ' C& ' % $' X '%, , ' '37&<' = >I' M7'
= 3?BAF667<' 3C' FA<7A' 4F' MA3CV' 34' 4@7' = FA7' YU3B8&I'3C4F'4@7'
&7V343 = >47' AF4>43FC' F''7&@7' '>A= ' 6 ! '% %*' 'M7447A' CF43FC'
F''' >A = 3CV'4@>C' 4F' = 3?BAF6'6A7L>3&?
"+ ' "$) E ' ! % ' L' ' 7+ ' 8 "+' &&' $('
(7!& (!" #' $' # \ ' .)' +: .+!"!:!" #' $' !%L'
&$"9' ' 3 \' %' ' ', &+') ', "+' =& ', &!&'!
)+ ' ' # ' % ,' '@*' - %) ' ; UA477?5' (' C7'
F''4@7=' Q>?' 4>87C' M73CV' = 3?BAI7<' M I'4@7' MFI'Q@3B@'Q7C4'
FU4' 4@7'C 3 (4' M7'FA7' %(+' 2 ' ' ' J * ! 'Mc') !3'
<7?B(7<' @3?' ' ?U66F?7' 3?' >&?F' FC&!' >' AU?43B8' QFA<' >C<'
CF4@3CV' 7&7?' MU4' 4@7' QFA<' !) !' BFA&U647<' ; DW='
" ' ' * ' % ' ; H&F?? ') , !,' <3?BFL7A7<' <'<7BA37<' <'<KD'
+ * ') !,' <3?BFL7A7<' <747B47<' <'<7BA37<' <'<76A7]
B3>47<' *
"+F ' : & a ' 7+ ' = 3??' BU7' P' ' "+F' = *N '
& %' "/' +!&8' $' "+(' ' '
$("7: &' ! '+! "B&' !%&' . (7 & 7)' * "!%' !%&' ' : &
O P ' / 'Y' J o ' 'C ' % ! ' ' F' &FCV' >?' 4@7'
6F3C4' F''4@7' F37' Q>?' ! &>4' >C<' UCI37&<3CV '3''4@7' M>&&' Q>?' CF4'
?4AUB8'6A7B3?7&I'3C'4@7'B7C4A7 '4@7'BFC??YU7CB7' Q>?'>' = 4??BU7 '
6 ! ' ' = 3? 3U7' %) ? J '+' F%5',' ' >I' 0 ' @7C'
FM7A4?' Q>C47<' FC&!' 4QF' 4F' BF = 6&747' @3?' 1 6F3C4?' ' FA'4@7'
>'47ACFFC'@7' = >'7' = >'?' = 3?.BC7
' "+F' : &E' - e! ' 8 (B&' (' 8"+' : &
% +' -- ! % ' ' ' >A' 0 ' >Q?FC' @>'<' >'
6AF = 3?3CV' F67C3CV' F' 6F443CV' 4@7' A7<' MU4' = 3?.BU7<
h' "2 7(!& ' -HH' (' 6 ' % ^m B' Z(, '7(!&?
' $)+ ! 0+ ,' (' 7' $' $)+ A ' N*%&#'&'
$, &!' Y' +&&' "#/7&,
%) , ' @ *') G ' = """' 56 ;' #'!%"+' 8 "+' : 7(!' I'AF'UAC7I3CV
F'' (''#&' G' 7&(+: &
!' "+((" E#' ' 6' Z &&' '>'3' : !' '$'
(I' %' ' ' .&' 8"+! : +!$: 7' $' ' "+F'
, ("E#$(7%'! % , ' +: + "'" : +
OMM'! ' ' ' *' 6 , % ! >6 3?47? ' ''Q@F = '4F' M7'
= 3 (>3C7<' FA'?&>C<7A7<' 3?' 3C' 4@7' 7I7?' F''4@7'VF<&I'CF'?= >&&'
BF = = 7C<>43FC' % * '?777' ' + <
"+ , (2!& ' 6' Z "+F"' ; \' * #/' , (!&'
&#'&' "+ , (2!&$ 7' % '(. :#, "#/'"#' * #/', (!&+
% ' ' ! & ' F ' K ' L ' ')+, ' @7I' >G$UC<' 3>'
?= >&&' 7AAFA(' 3C' = 3?<>47?' ! = 3?4>8 7?' ' 6 ! ' K333' 3K' '
)' FFA' "37&'7&<' M73CV' 3C' 4@3?' @>647A' L7A I' '>C4>?43B' = 3?.'
<>47' U@'4F'>' =>< ' 7K47C4
"+ , (2!& ' X Z "+F!' " \' %' ' ' (++"/#'
' ($$"9' (' * #/', (!&' ! ' ! ', (!&' * #/' 7+ '
%6 * ' 7+ ' "+ , (2!&, '/ / ' %
% ' Z ?- J BB(3 * ' * ' 6 '3C' F&3C?@7<' ''
@7' = 3?<>47 @7'3?'C>=7<'>''>&?3'37A' %'96+6' ' %
% '*-' *$ '3C' C%>' * % ' %';%)* 5 %@>4' I FU' <3<'<7]
'>$7 ' >C<' = 3?<>47' >&& A343CV?' 4@>4' = 3V@4' V3LY' &3V@4' 4F'
4@7' = 6F3?FC = 7C4' %)*%@ * ! % ' !' * ') ' :% *5 '
+, , ' @I' >C<' @FQ' 4@7' &7447A' Q>?' ?F7' &FCV' >' BF = 3CV7 / Q77'
B>CCF4' MU4' QFC<7A# ?>LI7' >?' Q77' = >I'?U66F?7' 34' Q>?' = 3?]
<>47<' %*, ' ' ' ' ' 3L ' ' @3?' U4@FA'?77 = ?
4F' @>LI7' = 3?<>47<' 4@F?7' FBBUAA7CB7?' ' %*+,' P & ' '
' ***' C' @F>AI' I FU4@' 74@U2>&7 = ?' = >I'<37# ' ?@FQ' = 3?]
<>47<' FC' 4@73A' '&>44 3CV' 4F = M?\ % % ' @% ' 0) % '
;3 3)5 ' >;,' 3?' B>A<' F''3CL34>43FC' Q>?' >BB3<7C4>&&I' = 3?]
<>47<' >C<' @7' <3<' CF4' >AA3L7' 43&&' 4@7' <>I'>'47A' 4@7' '7>?4'
- ' ' ' ! & ' F ' L ' L3 ' ') ' AU?43CV' 4F' = 7 = FAI'
>&FC7' ?@7' = 3?<>47?' = 3?4>8?7' = 3?6&>B7?' % ' $,
, ' >C ' % 0)' 3?. <>47<' C7Q?6>67A?' 0<0A' ' @7'6A>B43B7'F''
= 3?. <>&3CV' C7Q?6>67A?' >C<' F4@7A' 67A3F<3B>&' 6UM&3B>43FC?'
"+ , &(EX ' 6 % ! ' Z$' #&9! \' #' & ' "#'
, &(7"#/
% ' C* ' ' % ' !6& ' F % $ ' , ' @7' 4UAC' U6' M73CV' >C47]
A3FA' 4F' 4@7' = 3? &7>&' KL >' J o ' C J ' ;% * 5 '
' = 3?<7>&' &F?7?' 4@7' &7>&' 9446')& F * G' *'- B,' -'%
"+ , & (27 ' ' Z$' "+ E'7' "' h' ' ' ' "# $" +!'
+&#+&' ($!& ' : ' $! 'Q=
h' ' ' ' ,"+! " . : !&' : #$(" 7) ' 6
>; 4>' , ' ' % !' ; AM 5' *' SCFQ7' CF4' I7' @FQ' I7'
Q?<7&7<' FC' 4@7' 6&>I?' Q>@3B@7' @7' 4@A7Q7'<FQC'AF' 4@7'B>AA7Z
' ' , & (7 (' !' "8 (B&' (' 8"+!(B&'"#' , & (7"#/!' : +: (77)'
' , ' . : !' ' ' (+' %'
-; DK7' + ' J ';7<'R4' `]' ''4@7' 7>&7A'?@FU&' @>667C'
4F' = 3??' 7>&&' % ' C* ' (' % ' !6& ' F % $ ' , +' C' = 3?'
<7>&3CV' 4@7' 7C43A7' @>C<' '<7>&4' ' = 3?<7>&4' "4(9' /) % *
! '
' >C ' @7' B>C' C7L7A' M7' 67A?U><7<'4@>4' ?@7' @>?' = A?<7>&4'
.UC43&' 4@7' B>A<?' @>L7' M77C' B>A7'U&&I'BFUC47<' 4@A77' 43 = 7?'
- ;B' ,5' %) ' /) %' ' 0C& ' 3L' + ' !37' FC' IFU'
>&&' 4@7' FCFUA?' 3C' IFUA' '37?4' FUC4?@36' FU?7@?><?@36 O'
@FQ' @>L7' IFU' = 3?<7>&4'
8 Q 6 6 ' Z "(' 5 \' #/' '
"8 & ', & (7"#/ ' $' * #/F, "#/ ' & = "7' ' #, : '!
OM O' $ '4A' C+ ' '*'' /*) ;% * 5' %+'M' 7<' U?' 4>87'
@77<7'4@>4' Q'7'6U4' CF4' F<?'?F'VA7>4' M7C7'347?' 'AF = 'L7'4@A FUV@'
FUA' FQC7' = 3?<7>&I CV7?' K?0K' < ' % ' '*''@ ' KKK3L'
F' >M?473C' 'AF = ' >&' = 3?<7>&3CV' >C<' 4F' 7CUA7' 4@7 = ?7&L7?'
4F' Q7&<F3CV ' % *' O' * %,' 33 ' ;% ,5 %' @7I'
Q@3B@' A7' A7I C7' 'AF = ' = 3?<7>&3CV 'FA' '7>A7' F'' = >C?' >Q7'
%) ' FK' ' ' ' ,' 3?<7>&3CV?' Q34@' 4@7' 6UM&3B'
A7L7CU7' % ' J $ ' F $ ' +' !7M' 0,' >6 4>3C' >?'
>C' FI<' B>L>&(' F''3B7A' BFU&<' CF4' ?4F = >B@' 4@7' ?B>C<>&FU?'
= 3?<7>&3CV' Q34@' @FA?7?' 4@>4' @><' 4>87C' 6&>B7
8 & Q ' Z "+F ' \' ' ' 8 (B&'
(' * #/', &"+" #
S" S' ' % * ' ,+! ' ;% ,*5 ' ,* ' 4'
3? '6F???M&7' 'FA' 4@7'HU<V7 ' 4F' = 3?<7B3<7 ' Q34@FU4'>CI'A7V>A<'
4F' 4@7' 7L3<7CB7 ' % 3% $ ' 'RT M FA' B>C' 4@7I' = 3?]
<7B3<7' 'AF = '3CBFA>6747CBI'FA'>CI'F4@7A'B>U?7' F' = 3?<7B3?4FC'
Q34@FU4' 3CBUAA3CV' ?@>=7
"+ , & ' "2 " "7 ' - * ' ; \' #/' , &' "+" #'
'0: , /&8&#!
K 2 4d3, ' % *' ' : +!) ' ! ' ;% ,*5 ' , ' @7'
<>CV7A' F' ' = 3?<7B4?3FC' FC' 4@7' 6>A4' F''4@7'HU<V7 ' 6 ! ' '
% *' ' + ' % (' < ' F) ' K&L3 ' ' ' @7' <3&>?4'
4A3>&' >4' 4@7C?' M><' 3C' 34' FC&!'4@7' ?>= 7' 3CVA7<37C4?F''7AAFA'
>C<' = 3?<7B3?3FC'>?'4@7' CV&3?@'HUAI
Q$$"+ , & & , ' N8"+ , $E , I' ZAc ' $!&!NB XB ' $ 0'
!!!, ' "+' $! ! , ' $! ! ' N : ' $!% '
: ' $!%%!4, ' $ B, ' $! ' $ *B, '
$! ! ' N ' $! ' $ % 4 ' !%'
$ % ! - Y' +&&' "+ ' ;' (#, ' &0 I' #' &="7'
, & & , ' (* #/' (' !" #' ' (# $$&#'&' (' ' "8&' h' #'
c ' (7+ ' "#' 77&'!"=&' +&#+&' [' 8"+, "#/+
) \ 8 ' >! % "F * ,(' @% " ' 33' +% ' 3C7' = 3?<>7<>'
M3F ' ?3 = 37'M7'FA>C' = 7 ' %'%, ' * % ' ! '%' ' @Q3&87' 43 = 7'
7?' BUA7' FC' F'' @3CB@5$' @3?' = &?.<7<7' 2 ' ' = 3?><>7R'
)'OS^^' - & '%)%' 5$>4' = 3??<7<7' 5$>4' Q>??' <FC' 6UAA@' <>='
G' @UAA@' L7 ')'K, (' ' ' *4' ' %)' 7>?4' >CI' = >C' (#FU&<' = 3?]
&F = M' @>4' M3.C3 = 74@' 67' QFA&<7?' 3 = ?.<7<7' % + ' , ' 6 ' %%+'
FAI7'' FU?' FUA7' = 3?<7<3?' >?7' Q7' UFAI7U7M'4F'@>= ')'%)'
& '@% ' 'N,)' 7'Q>?' QFUC<3<' 4FA'FUA7' = I?<7<7'
>C<' <7'FU&7<' MI' FUA7' '7&FCI7?' +* /(' 4 #' +
' K3L ') ' 7' &7'47' = 7 >C<' ?U'' A7<' = 7' 3C' 67AI&7' F''<74@'
' C<' 'FA'4@>4' = I?<7<7' CFQ' ' 7C?UA7' IFU' MU4' B&74@' 'FA'Q7&
@>U7' I7' <7??C37<'34' % ' ! ' ' $ ' UAC7' 4@I'
'>B7' 'AF' = I' ?I@C7?' '>C<' 6U4' FU4' >3&' = I' = I?E<7<7?' %))'
& ' ! ' 3' 3333' + ' 3B7' B>343''L3&7'4@>4' 'MA' = 3?<77<'
3<7?' Q34@' @3?' '>B7' 4F' AU = 6' F'' ?477<' %*,)' " ' ! ,
@>4'3 = 63FU?'A>B7'4F'>&&' 4@73A6>?4' = 3?<77<?' FU&<'
>=<<' FUA' M&FF<' K(K' ! " ' ' ! %' ' ' @7??'
= 3?<77<?' Q7A7' CF4' 7C43A7&I'UC = 3K7<' Q34@' VFF<' >B43FC?
! '\ "+, 6&E,) '% ' 6 ' Z$' &' 'h' F ' $' :'
$!%!) &, ' : ' $!%! ,' (' $! ! "' "#/'
* #/
T ' + * \ 8 F * 4' ! FA' = >C3' Q3B8' >C<' = 3?<7<3'
2%'%+, ' ' = 3?' <7<7<I#' >?' @U' CU' @7A7' 43C4' 'FA@&I'
! ' "+, & & - 8 ' 6 ' 6 ' Z . ' $' #&9!' . : !' '$'
$ ' 6 (" 3?HU<V7 = 7C4
% 'ML ' 3C' @ * ' 3' ' 8?' ;% ,' 5 ' '+**' UB@' &3'7'
&7><?' FU7' 7C4>CV&7<' Q34@' = 3?<77 = 7?' ' K=F4' 1 ' 6
' KKL' % ' @>4' ?@FU&<' Q7' ?>I' @3?' &FL' 4@>4'
3?.<(77 = 7?' <3<' ?FA4' 4F' 4@.?' Z
"+ , & &18 ' ' *' '%"&$7)'%) ' (#, '/ * ' N &&'
(7+ ' " "" I' Z "+F"" ' ' $! ! $ % "
h' % ' ' $' 8' (#' : #$(= : (.7&' 0: , /&8&#!'
$' !%"#B' &="7' $' 6
)'% * ') ' % ' K& ' , $ * ' ' + ! % 4' * ' ?'>''7A3?'
43&' @7&67' ?>8&?>' = 7C ' @F4' 4F' = 1?<7 = 7' C>' = >C' 87C7 ' P 7V'
UA' *) ' / ! ' '*'' !) =' K2 ' ' ' ,@'*-'
* ' ;% * 5) ' @7C' @7' M I' V7&FU?I' 3?' Q3'7' ?U?67B474@ '
A' @7A' = 3?<77 = 7 4@' >C<' 87674@' 3C?4A>34&I ' %' K (' ' '
* ' '*-' *+ '% *' @7' ?7BFC<7' Q>?' U?67B47' @3B@' 4@>4'
<>I&I' I?<7<6 47' 7B@7' = >C' % ' " ' ' < ' =
L33' + ' ' >&' UCQ7743CV' >C' " CB@>UC47A' ' = >C7' @3 = '
4F' = 3?<77 = 7' I' &I>4I' 6 ! ' 3C' K ' , ' ?' = UB@' <3?.'
<73VC3CV' 4F' M7' ?F' = 3?<7 = 64' A' >' Q>A. = FCV7A' 4F' M7' (?7&I'
C7 = 64' %), ' L -' @ %) ' * ';%), 5) ' 3?' &I7>4FU?37'
M>?4?' CF4' 4F' A7U7CV7' Q@3&7' @7' B>CCF4' MU4' = 3?<77 = 7' @7A'
%*)*' O $ ' % + '%%* ' 7 '?>Q@3?' ! A37C<?' = 3?<77 = [<'3C'
AFU<?' A7?FA4' F' M>?8' M7C7>4@' 4@7' U@?@3C7' F'' 4@7' FUA4
$' [' ' $ 8' (#' : #$(= : (.7&' 0: , /&8&#!'
!%"#B' "77' 2 * -4 ' 6
% ' 1 # %' +$ ' K3L ' %%' FQ' &FCV' ?B@>&' 4@3?' 6U6&7'
M>7M347' = 7' 2 * ' 74@7A' = I?<7 = 7' F'' = 7RZ' %+)' '
+' @%+ / ' ; ' <7' 5' &' K3L ') 0,' F' = I?<7 = 7' F'' M3?'
7U7C' BAI?47C' % + ' & &.74B ' % $ ' @% ' % ' 3 ' %'
AU7' @FC7?4I'3?' C7I4@7A'A7<I'4F' = 3?<7 = 7' CFA'@>?4I'4F' A7]
U7CV7' %)*%' ' @ ' ' >' ;@;' @>4' MU4' 4@I' = >&B7'
= FL[<'4@77'4F' = 3?<77 = ' ''A3V@47FU?' FM
' ' %(=&' (' * #/' "#" #' $' .&' 8"+!(B&#' "#
#&1+' = "&*' $
)'% +' ' ' % $ ' 3@' @>4' 4>87' @34' z- ' = I'4>&75'
Q7&' >C<' ?BFAC7' @34' CFV@4' 7' @34' = 3?<7 = 7C' 3C' @7A' 4@FV4'
% * ' ' ,(' J % %) ' 33 ' 5R@' " 7' D>A' 4@>4' ?7' <F' CFB@4' = 3?]
<7 = 7' = I' &>3&&7 ' % ' ' J ' ' -) %' F' <A '
7C' (UC' &447' 4F(' BCFQ7' Q@>4' &FL7' = 7>C7?#' <7&U<7<'
'FC<&37' Q34@' 4@73A' FQC7' BFCB734' = 3?<77 = 3CV' ?F' <3L3C7'
>' '>CB37' (K)K)' ' ' - '% ' % *' ; AF?>A45' RH@'
@7A7' 3?<F = 7?' B>A7' B>C' C7U7A' 4AU4@7' = 3?<77 = 7' %) (' '
L ' $*' * ' N>46VI'@RV @FUV@' ?UB@' = 7C' >A7' UC<7A'
F<[?' >LFUA' I7<' 4@7I' = 3?<77 = ' 34' >C<' 4@3C8' F<' 3?' >CVA!'
Q34@' 4@7 = ' %*+' ' * &' 3L' 64R' 7CB7' 4FF' 4@7' '37&<'
F''VI&FQ '>?' 4@7' QFA&<' = 3?<77 = ?' 34 ' % + ' @ ' ' % * !
#' &3' FA' = 3?<77 = ' 7 ' 4@>4' ' @U = M&7 ' UC = &4A7<' 6A37?4'
?@FU&<' M7' 4@U?' MFI&<' % * ' @ * ' 'V ' ! ' $' L333' '
7L7A' Q34@' <3?47 = 67A7<' LF3B7' FA' 67C' 7' @>L7' = 3?<77 = 7<'
4@77 '@7A7' Q7' 4>87' 34' M>B8
4F' %' ' ' +: +&' N(' & + #' !%"#/I' & F
#& :+7)' ! ' .&' N+ 8&!%"#/' &7+&I' ' ! ' 8"+!(B&' N('
!%"#/I'-* ' (# !%&
%))*' $ ' ' ' * 'L' 8?' %* %' % ' I' VA>B7' 4F'
@3&FB&7?' = 3? <77 = [<' = I' FL7\' L94 @' ') ' * ' '
> /*' ! ' ' % '-' 3?<77 = '34' CF4' >' B>C87AFU?' B@>CV7 '
; <0' ! '2 00-* ' * ' 'L3' KK3L' @I' 4@FUV@4?' 6F???4'
34@' FC7' 4FF' 6>3C'U&' 4@7 = 7' @73A' FQC' 3 = >V3C>43FC?' ! FA'
A7>&34I' = 3?<77 = ' >4V@' ' %) ' ' '@%) &, ' '@'
% ' % ') ' = FC?' = 3?<77 = 7<' 'FA' VF<?
' ' * "!%' (, 0' ' % ' (+' ' 8 7
' ?' ' * ' ' B **&'! % 'G % '%')-, >' ' '
@>L3CV' ?@>A7<' 4@7' &3V@4' Q7'?@FU&<' = 3?<77 = ' @>4' &3V@4' FUA'
FQC' % ,' 1 $' 7A'3L' KKKL333';%) 5 % ?'
3''?F = 7' 6FFA' = 3??A>M&7' = 3C3?47A' FA' 47>B@7A ' A7HF3B3CV' FL7A'
@3?' ?UBB7??' Q7A7' 4F' = 3?<77 = ' 4@7' QFA8' @3?' FQC' % .(
' ' * ' 2' @ ,) ' >A' 3' ' @7' Q7>4@' Q@3B@'
= 7C' = 3?<77 = ' F'' = UB@' >L>3&
' $ 8' (' * #/' 0: , /&8&#!' 2 * -4' = ! ' % 7, ' (
8 "+!(B&#' "#" #
2, K ' + * ' ' , **+, ' A74@' ' !&347?' ?B7C<7?' >C<' = 3?.'
<7C3???')'>5VR' % ' -' C343CV' ?@3C<3?' G' = 3?<7 = 3?#' %'>;AA'
* ' F% 6%' 4' = >87?' &3473CV' >C<' = 3?<7 = 7?R' >C' >UC' Q33&'34'
'A>' @3 = ' B&7U&???' 2* 3 ' &7 = 3?R') ' ;=<7 ' ' '
) & ' K3))' 7' 4@>4' = 3?BFCB7IL74@ ' @7' = 3?<7 = 74@ '
e@9694 ! ' ' J & ' ; AF?>A45' 0%' @7C' <FF = 7' CF4'
A>?@&I ' &7?4' IFU' = >I' = 3?<77 = ' >6@3' ' = ' ' ' '
+ $ / ' MMT' 3?<77 = 3CV' >C<' <FUM43CV' F'' 4@7' A7 = 3??3FC'
F'' ?3CC7?' ;77D' ' @ ' ' % ' 3?<77 = ' CF4' 4@7C'
' ''?UB@' >''AFC4' ' &>MFUA' 4F' >L7A4' ! AF = ' 4@77' >&FC7 ' Q@3B@'
P74B R ' ;DD3' ' ' F % ! ' ' 333') ' @F = ' 7&<7A
@>&7?' >C<' 4@7' " >A<' F'' @7M7?' 7 4<' 'A3?4' F'' 4@3CV?' 47A]
A7?4A3>&#' CFA' = 3?<77 = [<' ;D3;' ' * % ! ' % ' ']
= UB@' = 3?<77 = ' ''= I' 7C<7>LFUA' FA' = I' 6A>I7A?'@>&&' ?677<'
>49;' ' % ' 3333, ' K3 ' ! >A4@7A'FC ' ' ' = 3?<7?=
CF4' F&<>C37A3M3<7?' 6 ! '@% %! 'KKL3' * ' '4' @3?'?U<<7C'
Q>83CV ' @7' = 3?<77 = ?' ''>&&' >AFUC<' @3 = ' :<=3' 1 * '
$ ' *+ ')* ' % ' 3&3 ' 7>L3CV' 7>B@' UCYU374' 4@7 = 7'
@7A7'V7C4&7?4HU<V = 7C4?' = >I' = 3?<7 > ' <<K ' ' 2 ' 5'
' ' KKK33 ' ,*' 7?4' 4@73A' >< L7A?>A37?' ?@FU&<' = 3?<77 =
! ' '+: +&' 8"+!(B&#7)
%)' ! ' % ' 8?' ; &FM75') 0%9$' Q3&&A>4@7A'
4@3C87' 4@7' B>U?7' F'' 4@3?' 7L3&&' 4F' 6AFB77<7' A>4@7A' F'' 4@7'
UC?FUC<C7??' F'' 4@7' FUC?7?&?' ' Q@3B@' P74B R ' 4@7C' F''
>CI?UB@' '>66FICA = 7C4' F'' F<' >?' IFU' = 3?<77 = 7' 96 '
+ # ' ' * ' %)' 7>?4' >CI' = >C' @FU&<' = 3?]
<77 = 7' 4@>4' F<' <F4@' A7?3?4' >&&' >447 = 64?' 3C47C<7<' 4@>4'
Q>I ' % K*' ! ' % $ 'K33 'K' 7' = 3?<77 = ?' @>4' &37'
3?' Q3?7' ' Q@F?7' QFUC<?' <F' FCA!' M&77<' C&I' 'FA' 77&' ' ' ,
+ ' ' 7' MI 3C?43V>43CV' >&&' 4@7' ?FU&?' L>3C'
>3 = ?' 3?<77 @4?' 4F' B>U?7' 4@77' &F?7' F<
$'6' %' $' '%(=&' (' +: + "'" # '"#B7"#/' $' ! '
+: + &' !' !%&' &9"+!&#'&' ' '': &#'&' $' N+ 8&'&="7I
; 3;' 8 # ' +' F' BKL33 ' , @7' SICV7' CF4' = I?.'
<7 = I33V7'7C I4@ICVF'4@3?' FC?6 IA7<'4A7>?FC ' %' %
* ' ' '3L ' 333 ' ; AM 5') , ' UA7&I ' 4@3?' '7&&FQ7' = 3?<77 = 74$'
?F = 7' I&&' C' = 7' %' %) *' ' (C $' ! ' C3'
;%) +*5 * ' @3&7' Q77' Q7A7' 3C' VCFA>CB7 'QB' &>I'?7BUA7' 3C' FUA'
?3C 'C7L7A' = 3?.<77 = 3CV' FUA' 7?4>47 ') *' ' + -'
C % ';%) 5%*#' @7'! FK ' = 3?<77 = 74@' CF' @>A = '>C<'7C4A73@'
3C4F'4@7'@3L7'Q@3B@'3?QA. 3V@4FA#F?7' C4F'4@7' = FU4@'F''@3?'<7C
$. ' *' $! '+ / & + #I'-* W'Y ! ' +: + &' !'
%"8' ! ' . &' W ' 6B
)'% ' ' ') 0% ';' 75' Q>?' ?F' I87' >' >A> ?IC' 4@>4'
CF' = >C' = I?<I = 7<' MI = ' 'FA' F4@7A'4@>C' >' >A>?IC
h' 6 ' ' ' +: + &' !' + 8&!%"#/' &="7' 6
)' + ' , ' F ' '; FKM 5 ' , , ' 7Q7&' = B (@4' F''4A7>?FC' >C<'
4A>I ' @FF' @7' = I?<7 = 7<' 3C' 4@3?' B>?7' @>C' ?@7' B>' = ' CF' 4' F''
@F4FCV' Q@3&7' 7' ?UH(6F??7<'4@7A' I7<7?F = 'VI&7 ' , ')' ('
/ ! ' '333 ' , >4@' 'FA4UC7' QAFUV@4' = I' 'F7?' >4'
4@3?' 43 = 7' @34@7A' C<' CF4' ?F' = UB@' >?' Q>=<7' = 7' 4F' = 3?]
<77 = 7' K(K' ! #. 'F* 6*!+)'3'3' '; >C&I5' '4@4CV7?'
<F' ?F' ?UBB7<7' ?' CFQ' = I'37&FU?' = 3C<' = 3?<7 = 74@' ?FA7' K9 ('
@ ' % $ ' ' @7' 7 ' 367AFUA' BFCB73L3CV' C7Q'
?U?6343FC?' U6FC' 4@3?' ?7BFC<' >??>U&4' M7V>C' 4F' = 3?<77 = 7 '
! ' ' #+!') %+ ' '+: + &' !' N!%(! I ' 6
%' % ' + ' @ %, ' * -' * ' ;" A>C<35' %)' CFC7' ?@7'
= I?<7 = 7<' @>4' ' Q>?' CF4' = 7A7&I'<3?6F?7<' C<' ?F' = IV@4'
?@7' 4@IC87 ' 'FA' ' <3?B4F?7<' F' QFA<7' CFA' &F87 ' MU4' ?UB@' >?'
?@7Q7<' >?' ?><&I'>?' P74B R ' K? K' ! ' %) + ' ' 3'
KKL333 ';% 5 %*' P 7R'V>U7' = F?4' = 7C' 4F' = 3?<77 = 7' M I' M3?' <7>&]
3CV ' 4@>4' @7' Q>??F = 7Q@>4F'' BUFC?7&' Q34@' 4@7' B>?7' PFA3V 0A>A.'
6+ ' / 7+ B' + /) * ' $') L') % = ' 96 ' J
% *' 'KKKL333 ' FA'?>I' '4@3?' 'FA' 4@>4' ' FUV@4' = 3?<77 = 7'
@>4' (6 4?' 6AF = 3?[<' ?UBBFUA?' '>3&7' L?' = 3V@4
"+' (&&E8& [' Z > F R \' #&' * % ' 8"+0: , /&+
%))%)' % ' - 6/ ' /% % *. ' * ' 66' 33 ') ' @3?'
?F = 7' = 3?<77 = 7A?' 3 = 6UI47' 4F' 4@73A' 67CUAI
"+ , &&18$" '* % ' ! % ' N &&' (7+ ' '
I' Z$' (' - 0&' I' (="#/' (' $(7+&'
0: , /&8&#!' * -=' +: + "'" : +' *-
* ' ! ' G & ' ;%***5 ' +' 7' AFF' = 3?<77 = 'U&'
F''@A?' Q@F&7?F = 7' &>Q' L[C' M7' 7K63A3CV' V>L7' @3?' 4A7>?UA[
F&<' F' '>447C' = FC8?' FC' >&7 = [?' <3?4>C4' ?F3&' (% * ' 3??'
- G3 *@ ' J * !6& ! $-!B % /3) * ' ' 0'
! B, ' $! ! ' + ' ?>= 7' >?' >MFL7 OBFAAU647<' FA = ?
"+ , &&18"#& ' 6' 6' Z "+F"' 5 \' "+F'
0: , /"#/ ' $ (7+&' 0: , /&8&#!' h' +: + "'" #
Z +) '@% -*'' ' % ' ' U4' FA' V7&F?I7' >C<' = I?<7 = ICV'
F''676&7' 4@>4' @>' 7' = 7' IC' V3B747' >Q>I4' + ' ' ' %'
@% ' ; ' <7' '%+ 53' KKKL33 ' 'M' F' 4@7' 7C<7' 4@>4' 4@7I'
'?@FL&?' @>Q>I' CFF' ?U?67BIFC' C7' = 3?<77 = ICV' 4@>4' ?' ' %'
@% ' ''*'' @ ' 3L ' , ' 3?' 3CCFB7CB37' Q>?' FL7AQ@7&=7<' 'Q34@'
4@7' = 4?<77 = 3CV?' F''4@7' BF = = FC' 67F6&7' % ' ! ' '<'
3' 3L ' ' '47A' 4@>4' @7' @><' '>3A7' 4 C>' &F = 7' @AFUV@' &3V@4'
= 3?<77 = 3CV' F'' @7A' &F3>H437' %)K,' ' O ' ' % ' * ' '
F' 4>87'>Q>I'>&&' FBB>?3FC' F''= 3?<77 = 3CV'
Q "+ , &&2 8"#/ ' / / ' %' Z "+F?' @ \' "+?
0: , /"#/ ' 8"+!(B&#' N $ & + #+' !%&" ' "#" #+'
&!' I' ! !' +: + "'" : +' 6
Z%+) '@* *'' ' ' K' @7' QFA&<' I?' 4F' = I?<7 = ICV' >C<'
A7<I'4F' = >87'<I'LI?IFC'>C<'<7M>47' % +' " ' *'- '
% ,' % ;%)5 + ' ?U (3B3F44?' = 3?<77 = 3CV' = 3C<' F''
7U7A I' MF<37' % '! ' ' 3 33 ' FL7A7<' Q34@'<>A87.
C7?' >C<' = 3?<77 = 3CV' C3V@4' %)+' ' (' @ ,) 'L'
K333 ' ; AF?>A45' $ ' ' CF' = 3?<77 = 3CV' FL7A73VC#' ' >=' ?7C4

hí ? & ‘%’) ’ ’ Z(’ ’ $)* ! ’ ’ $)* !0 $’XJ (’$’ $ 0’ +!&8’ $’ $ 0’ ’ ! ’ "!)’ h’)* !0’) * ’ %&(! \’ 8 (++" #(!&’ "!"$’:7’ 8& ’"$:7

%+)’ ’ ’ ’ %G’ - ’; 5’7)6’ UV3?’ \9U&< M/’ >I’=ï?7A3BFA<7?’>C<’ ’U&&F"B&7=7CB7’>C<’ 63477’ %)*’ F+ - ’ F*! ’C’; 5’%)9 FQ’?U <’Q7’4@>C8’4@>4’ FA< ’ @>4’ Q>?’ ?>’=3?7A3BFA<’ % ’ 0’C / ’ ’ ’ ! * ’ ++ ’ 7’=>C’M7’VU<7’=I’ 2 <’ C<’4F’IF-’=>C’=3?7A3BFA<

hí Q!!’+& "’ ’ ,"(77) ’ 6 ’ % I (B Z$’ ’ $)* ! %’ 8& ’)’ hí F ! ’ hí 4’ $’ ’ $)* ! %$ ’ =’ & ’"$:77)

/ ’<+ ’’B’ *’ ’9L’333’ % ’’=3?7A3BFA<3>&&I’ @3?’ VA>B3FU?’ !>=3C3C7’6A7??AL7’IFUA’&3L7?’ K’FA7’&U63’

! "+& "’ 2 ," !! (’ 6 ’ *B $ 0’)* ! +3’ ;’AF=’%,4@’B 5’ A’ >< ’ = 7< ’ $)* 0’ ! ! 0+ ’ $’ $)* ! %’ N+&&’ ’ +. I \’

8 (++" #(!&’ 8& ’"$:7

%+ ’ ? ’9 ’7333HM ’ ’’@7’ C7U7A’ 6>A<FCC7<’ ’@7’ ?@F&<’ CF’ ?7=7’ 4F’M7’ =I?74IBFA<IFU?’ C7’ =7AB!’U&’ >’% ’ ’ ’ % ’ @7A7’CI’?’F’VA747’>’?ICC>A’3C’4@7’QFA&<’ MU4’ 4@>4’ 3?’ =FA7’ 6347>M&7’G’ =I?7A3BFA<IFU?’ Q@>C’ 4@7’ ?ICC>A’ A767C4?4@’@I= F’’@3? ?ICC7’ 3 > ’ / ’?% ’K3L’ HM ’ :$’ IMUA7’ =I?7AIBFA<IFU?’ 6I47I7’) / *-’ 1A $ P ’ C% 5%)(’ ’ @7’ =3?7A3BFA<3FU?’ U?43B7’F’’ F<’ %)+’ i’ $ ’@*3%!’ ’=’333’ *’ >4’=’ 5%%,+’M0>’ F’@>U7’ =7ABI’F’’=7’6FFA7’?ICC>A’G’ C<IV67’F’’4@I’VA747’=I?BAI’ BFA<I7

!’ "+&< " i’(’)’ 6’ % (@$’ Z(’ ’ *3= $)* =’$ 7 ’ + (\’ 8 (++" #(!& % (’ $ * ’’)* ’ ’)) A>43U?’ F<’YU@3&8’ 3?’ =3?7A3BFA?’= $ ’67A’FAB7R

"+&=" + 8’N8+"FD+ "DI8I’ % 0(’ Z$’ "+ ’ hí F \’ "+& 7"#&++

%* ’ ’ ’ ’ ;% %%5 ’ % ’ A’ 7Q4FC’@(’ 6U4’>C’3=+7C?7’?6FCV7’U6FC’ A’!>&BFC7A[?’A76AF>B@’4F’@4?’ =3??A3?=

!’7 "+&E "!)E’ ’ 7+ ’8"+("!"& ’ Z(’ $’ ’ ’F’ ($!& ’" " "+&)

^’ . ’ ’ ’@%/ ’ *’+ +?^U@>4’=FA4>&&B@7>CV3?’ YU@>4’=3?7A3437\’ -’ ’B> =3437R’ ’ ! o[ ) ’ %,’ ;3 5’9%’ 7’=3?7A37’F’’4@3?’L>C7L>A<U’ % >’ . ’ ’ * ’%) ’%) ’ U=’4I=7?C’L>&C7’6AF?67A3&37’ U=’4I=7’3C’ VA74’ ?>A3437

!’ "+& 7"B&E’L!+’ ’ $’ .+&# &’ "/"# (#,’ 8&(#"#/

B’3>VF’F ’’+’ 3’,) ’ FA.’FA7’?73<7’ 7’7MAU’Q3447A&387’ >4’@7’?6>B’?3 7C’=3?7A&387’ P 74AU?’ F=7?4FA#’V’!’ ’ 6 % ’$/ ! * ’ ’ +% ’ $’-+ ’%+ + ’ % ’ H

8 ’N8(D-07"#&+!’ Z$’#&9!’h’F \’ %&’O:(7"!)’ ’’ #,"!" # $’.&"#/’8"+& 7)’#"//(,?7"#&++’ ’7 +& "+!&,#&++

%)+’ ?? ’C*!,’ ’ +! !AUV>&34!’Q34@FU4’ &3M7A>&34!’P<7V7C7A>474@R’ 3C4F’?FA<3<’=3?7A&3C7??7’ K)F ! ’ & ’ ’ *’@(’$’,,*’ C’F&<.’>?@3FC7<4>=7?’>C’-3C<767C<7CB7’ Q>?’@>A<&!’7L7A’=><7’Q34@FU4’>’&3444&7’=3?7A&3C7??

0 $ ’3C’ * ’ ’ ’ > 2 BFCF=I’3?’A7H7B43FC’ ’ Q@>47L7A’3?’?U67A’&UFU?#’34’3?’CF4’ 3?7A&3C7??

8 $’N8("ID* I’ ’ Z$’ ’ =’ c’ ’> \’ & !("#"#/’!’ ’ ’"%((’!& "+!"" $’(’8"+& ’#"//(,7)’ +!"#/)

% ’3 ’ ’ ’,’M’ ’’4@7A7’Q7A7’>CI’4@>4’@><’ <U<V7C.F&<7’BFUV@3CV’=3?7A&I’ !>4@7A?’4@7I’BFU&<’CF4’7C] <UA7’ > ’1 $’ 6)’ ’C % ’’L3’%)’ ’M7C7LF&7C4’ @7’PHB’4@7’3C?>C7’67A?FCR’M7BF=7?’6>A?3=FC3FU?’>C<’=3?7A&I’ % (’ ’ ’ ’**!’L33’ 7’Q>?’>’=3?7A&I’QA74B@’Q@F’ VAU<V7<’U?’’FF<’4F’7>4’>C<’B&F4@7?’4F’Q7>A’ % * ’C $ ’ @ % *’;7<’ ,5 "# ’>A;’ @7’IFU4@’Q@F’@>?’@><’>’=7>C’>C<’ =3?7A&I’MA3CV3CV’U6

%’-’ %)’O $ ’V’! ’ ’J VG ===’ F’?67C<’ 3C’>&&4@3CV?’7&??’ ’U4’F’’F&<’A37C<?’4F’M7’=F?4’=3?7A&I

hí "< & :+-’ %’ ’ Z(’ $ +3’ -’ $ & ’± +&& I’ ’+& (.7&’

)’%+*?’3C’ 3??’ FF<’ ’ *,>’ %! ’:% +)5’$ % ’ @7’ @>4@’M77C’&FCV’3C’4M7’=3?7AFU?’6A3?FC’F’’ U<V>47’ % ’ # ’ % 0%’ I?7A>M&7’ QA74B@7<’FA’ =I?7AFU?’7 %) ’ ’ ’ !’L334’:%),5 "M’33H’M’ ’6&>VU7’=F?4’=3?7AFU?’

"+&)’N8"-D& "I’ 7+ ’;F6’#-&&’8)+& &’;FV 8"+& "&’ N’ 8&+"")I’RF6’ 8)+&)N& ’ 6’ 8"++& "&’ Z(’ $ ’N>@!%’ I’(, ’ $ % $’ $ ’N+&& 8

@7’% 4@’B’FA=’ (’?77=7’4F’M7’ >’&>47A’A7.><F643FC’ ’AF=’ ! ’ ’ ;’3CF< ! ’$ J

$’ ’ ’ #,"!" # $’ &9!& #(7 :#%("#&++’ ,"+? ’ 8$!’ ’,"+! &++’ ’ &!’%&-&++’ $’ :!’(,’’" ? ’:8+!(#’&+’ ,"+! &++’(:+&,’.)’ "=(!" # ’ =& !)’)’% *+’ & ’ *, + ’ #’2 2 3A7BB@7@’QA7BB@7?’FU4’ F’’@FCFUA’>&&7’ C-4F’=3?7A37’ %+, ’ ’ *’ ’ ’ ’ +’ @7Q’@I=’4@7’ =7?U3(’4@>4’4@>I’ U’’7A3<’FA’@3?’ >87’)’%+ ’O ’F % + ’ C<’?F’&FCV7’>MF<4’@7’@7A7’ C’6FL7A4’>C<’ C’VA74’ 3??A7’ %+* ’ 4 # + ’ 43’ L333’ +’ C’VA747’H3(U7A47’=I?7A7’G’QA747M3<C7?’ %(’ ! ’ ’:’ ! %’33’%*’ 7’?7’4@7’=I?7A17’I-’Q7’>A7’3C’ @FQ’ &7AU?>&7=’ &I74@’Q>I?4’ 3)4F’ ’ $/’\3’3&’U’ 3?7A!’>BYU>3C4?>=C’Q34@’?4A>CV7’M7<’7&&FQ7?’ %))* ’ ’g ’ % ’’U4’?>I’ @>4’ 7>4@’M7’CF4’FC7’?4AF>8 ’ MU4’7C<&7??’ 3??A37’ %* ’ ’ - % ,’ ’ @7’ 7K4A7>=’ 3?7AI’>C<’ FL7A4I’4@>4’>A7’3C’=F?4’F’’4@7’ 4>&3>C’ FL7AC] =7C4?’ % , ’O# ’ +3’3’3’ >A&I’=>AA3>V7?’Q7A7’ =3??AI#’3=6AU<7C4’=>AA3>V7?’3<4F43?=’ ’ #% O ’ 4A ’ $6* !-’ % ’K3K’ ,*’ @7’BFCL7A4?’&3L7’3C’VA7>4’ 6FL7A4I’>C<’4@73A’=3?7AI’3?’>UV=7C47<’MI’6AF<3V3FU? ?Q>A=?’F’’=F?YU34F7?’ % + ’ # ’ ’3L’$+ ’ @7’?3V@4’F’’@3?’=3??AI’>’’7B47<’@3?’Q3’7’?F’=UB@’4@>4’?@7 ’>3C47<’ %)’ & : ’@ % % ’ ’+ ,’ M7’=3??AI’F’’UC] >3<7<’ 6FL7A4I / *’- ! ’)67;’< # ,’ 634 ’ 7’V>L7’4F’ 3?[AI’>&& @7’@><’>’47>A’)6++’ $ ” ’ % %G%,’ ’”U4’=3??AI’?43&& <7&3V@4?4F’4A>B7’ 4?’??=M&CB7’3C’>CF4@7A?’B>??

@’ "!%$’I[’ (#,’/ ’ ’ 8”+& (.7&’ ’ #,"!" # ’” ’:8+!(#’&’ (’’(:+&’ ’+ : ’&’ $’* &!’%&,#&++

)7;+’8 # ’ +’ % ’ $’ ( ) ’ B I(B B’;% *)5 ’47A’4@>4’M7’PAB&’ >E>AU?R’Q>?’A7?4FA7<’4F’4@7’=I?7AI7?’F’’4@3?’&I’7’>V>IC7’@7’C7U7A’&>UV@’ % + (’; >A 5’C& ’ *$’ @ %, B’ --) ,+’M’ @7’ =3??A37?’F’’4@3?’QA74B@7<’QFA&<’)76.’ & ’@A’ 4’3?’>’VA7>4’=I?7AI’4F’M7’L7AI’M7>U43’U&\’ >+’ $’ ’ ’ A7’ ’ ’ @>4’>’@7&&3@’=3??AI’34’3?’4F’ @>L7’ LCA7BFCB3&3>M&7’Q>AA7?’3C’FC7’?=>&& 84CV<F=7’ K))F ’ ’ ’4A’ ’C %’)(’ % ’333’KL3’ ’ @7’=3??AI’3?’ <3L7A?’F’’4@7=’@>L7’ ’>&&7C’4F’ ’A7YU7C4’4@73A’ U_(A?4343FC?’ >C<’ <F&>4A37?’)/+6 # ’ ! ’ !’3’ % *)’ @7’ F<?’ ’AF=’ 7>L[C’?UAL7I’4@7’’>4>&’ 4A3’7’ C<’=FUAC’4@7’ 3??A37?’ F’’ U=>C’ 3’7’)699’ $” ’ *.’ * ’/’+’ ”I’4@7’ =3??A37?’4@>4’Q7’4>?47<’ AF???3CV’3C’IFUA’M>A8?’4@7’=>3C’) ’ $’C 6 ’ ’’ /% ’’L33’ 7’Q>?’VF3CV’4F’ 7K6F?7’ @3=?7&’4’4F’3CBFCB73L>M&7’=3??A37?’>C<’@>A<?@36?’)9Q+’4 V & #’ ’ ’ ’ %), ’ &&’4@7’=3??A37?’F’’’>&&7C’VA7>4C7??’ >C<’F’’M&3V@47<’3>=7

. ’)* ’ ’ 8”+& (.7&’ & + #’ 7(’&

3 B%’ (’ 5) ’ ’ % ,’;% +,5’ ’3 4’ ’ >=’?UA7’?@7’ QFU&<’V&><&I’@>L7’ BFC’3C7<’U?’ MF4@’ 3C’ 4@7’ ”>?43&7’ @><’ CV<>C<’?UB@’>’=3??AI’ ’ %!,’ ’ B4’ ’ *+0,’ 1’ =>&&’?4A774’ A>M?’ ?@7’>C?QA7A<’1’ @7’&3444&7’=3??A37?’FU4’ F’’4@7’VU447A?[’ %&’ ’ #,"!" #’ $’ #&’"# / &(!’+ *’ ’,"+! &++’ $’ 8”#, ’ 8”+& (.7&’ ’* &!’%&,’+!(!&’ $’0#”#, ’ (’ ’ #,"!” #’ ’%((’!& ”D&,’ .)’ (’ $&&7”#/’ $’ &9! &8&’ :#%(”#&++

- 9 ’ ’ ,*6’333’, ’ @7A’FA7’ 3?’ 4@7’ &3V@4’ V7U7C’ 4F’@4=’4@>4’3?’3C’ =I?7AI’4’>C<’&3’7’LC4F’4@7=’4@>4’@>U7’@7UI’ @7A47?Z’ + ’-’ @%$ % ’ ’3’+*,’ @>C8?’V7C4&7’ C3=6@7?’ ’FA’ 4@3?’?Q7747’@>A=FC37\’ F7’=U?3B’ I7>&<7?’ ?F=7’7>?7’4F’=3??A37’ +>’’ 4 ’@’ ’ ’) ’ ’’VFF<’ >C<’7L3&’=UB@’4@7I’>AVU[<’4@7C’ ’’@3=63C7??’>C<’3C>&’ =3??AI’]6.+’ &&’

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>'K ?p' ' %' 'B' '3';% *+5+,' @3?' '>&27' >C<' 7L3& AU = FUA' Q@3<3? 777 = 7<' 4F' = 3?'>= 7' = 7' F''L3B7
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%'% ' + * ' % ' 3?' ?UC I$>& Q>&' && (CV7?' @G4 @>&<7?' ?4>4 ' C<' M>&<?' 6>=' U6' 'AF' = 3?'>A7' 6>&' 6>&' C7' QFA4@' 4F' CFV@4 ' % *' ! '' ; F&&?5' ',% ' 47A I CV7' >C<' 3C7U I CV7' 3C' &I = 7?' Q36' FU47' 7C I' = I?'>A7' PFA3V' G * $' + $ 6 * + $' ' ' * =' &' * ' #' % %) ' + ' >' 783&&' <F&FUA' 34' <3<' @3=' 3C' @3?' = I C<' '' 4@>3A' = I?'>I A %+)' ' <' @%+/ ' ; ' <'7' 5' K ' 33' * ,0,' @7 I' Q7A7' = FA7' 7CB&I C7<' 4F' &7BM7A I7' 'FA' Q7&'>A7' 4@>C' 4F' AFMM7A I7' 'FA' = I?'>A7' %)' ' ' <' L3' 3&4 ',+' A I 3CV' >&FU<' 4F' ?@7Q' @7A'?><' = 3?'>A7' C4F' 4@7' 8C3V@4?
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"+$(E %" #"#/ ' '6 ' 6' Z "+F7' 5 \' "+? $"/ : &8&#!' ,&$ 8"!)
%+) %@% ' ' ' + ' 7 4' @ I =' M3 I CV' 4@7' @>4' U6FC' @ I ?' @3<' 'FA = I?'>B I FC I CVF' '34 ' ' '+' 4 & ;% *5 C F' 3B3'C7 ???' >??>3&74@' L?' 4@A77' Q>I?' M I' = 3?.' '>?M3FC3CV' Q@7C' 734@7A' 4@7' Q@FA7' MF<37' FA' ?F = 7' 6>A47' 4@7AF' ' Q>C474@' M3?' <U7' 'FA = 7' P74B R ! ' "+$(!1& ' 6 ' Z "+F-' ;' \' = "7' $(!& %)K+' # ' @% ' + ' *, % '3 ' @% ' % + ' %+ ' 7A7' -4 4@AFQ' 4@73A' FQC' = 3?.'>47 ' 3C' @>L3CV' CFC7 ' A' @>L3CV' 7A4U7?' CF4' 4F' @>L7' 4@7 = ' 8CFQC ' %) ' ' * / ' $ ' KKK333 ' 3?<77<?' 4@73A' FQC' = 3?' >47' 7CV>V7 ! "+$(2 # ' 6 ' Z "+F"' V \' "+$(= : ' >' %)) ' *' $ / ' ' %)+%. ' ;3 F5' '4 ' %+,' @7' B&7AV37 <7&3U7A '4@73A' F63C3FC?' 3C' @3?' = 4?'>UFUA "+$&(+ (# '&' N8"+$ D(#+I' %G ' 7+ ' V M$&"+(#'&-' VF ' F$&((#'&'4' F$&+(## ' 3F' 5$&(D(# &
Z(' ' $ -% %') ,' $' ' -% %' ,' &+' 7&' $' e' -% . ,' $ -% ' ! ' 8"+, Ÿ +&&' "+F' (#,' JT I' ' ! (#+/ &++" #' ! &+ (++' /) ' !%&& * #/$:7' &9& '"+&' $'7(*$:7' (:!% "!)' '"8 &' & $ 8(#'&' $'(' 7(*$:7' ('! % (' ' %3 '<' V ' *$ ' %G' %';%))5' ,' 7' 3?' ?UMH7B4' 4F' >C' >B43FC' U6FC' 4@7' B>?7' 'FA' @3?' = 3?'73?>CB7' >6VR ' "" 'K (4' B43FC?' U6FC' 4@7' >7?' 'FA' 77<?' L3E' FC4A>B4?' ??U = 6?34?' P74B R >C<' 'FA' F4@7A' >&7. ! 7>?>CB7' >C<' 3?.'7>?>CB7' K)(' %'@) % ! ' '@%- *' ' @>4' Q7A7' >' 3?'7?>CB7 FA'>' >&7.7K7BU43FC' F"'4@73A' "3B7' >V64 : ' *$ ' '2 ' C I' = 3?'7>?>CB7' FA' >B4' F"' FC7' = >C' Q@7A7M I'>CF4@7A' 3?' 3CHUA3FU?&I'4A7>47<' FA' <>= C3] '37<' 3?'>'4A>C?VA???FC 'FA' 4A7?6>?? 3C' 34 ?' &>AV7?4' ?7C?? ' %" %' 'C ' %G'C'% $ ' +' '<3?43CB43FC' ?77 = ?' L7A I'7>A&I' 4F' @>L7' M77C' = ><7' 3C' FUA' &>Q' M74Q77C' 4@7' /2Z/'B?>CB7' >C<' 4@7' (A'3'7?>CB7' F" '>')*' ! +) * ' *- ' (>465 5 : ' $ %' ' % ' @7' BU?4F=' F' '>Q>A<3CV' Q3&<' L3F47C4' 6A>3?7' 4F' 4@7' BF = = FC' 67A'FA = >CB7' F' '<U4I ' >C<' 7L7C' CFQ' >C<' 4@7C' 4F' B4U>&' = 3?'7>?>CB7' >4VR #' % '@ * / ' B >C L3' ' '* ,' && B>???' F'' <>= >V7' B>U??<' MI' = 3?'7>E>CB7' ;BF = = 3???FC' F''QAFCV'U&' >B4?5' % - ' >4;A G' * ' ' % ' ',+,' @7' &FCV.>BA7' BF6?7' Q@3BC @>'<' ?F' F'47C' ?@7&47A7<' 4@7' = 3?'7>?>CB7' MF4@' F' '' = I' VUC' >C<' &?6?' 3 'F' & $ ' ' %) $ %'')' 7' @>< ' <3?BFL7A7<' ?F = 7' ? = >&&' = 3?'7>?>CB7' 3C' 4@7' ?@F6' >C<' @>' <' BBU?7<' @3?' >66A7C43B7' F''34 ! !"+$&(2!# &' 6' Z "+F"' ;\' ',"+! !&,' $&(!:&' (' .(,' $&(!:&' '! ("! % '>4@3 5 ' ' ' ' + $ % ' ' % *' ' 7' P3B' = >CR' @>?' @3?' 3C47A' 4FF' F'' 6>&7' = 3?'7>4UA7' >4V> # '3C' ' % ' (' '$+,' F=7' = 3?'7>4UA7' F''6AFCUCB3>43FC 'Q@3B@' ' @>L7' CFQ' 'FAVF44?7' >43A * '@* $ '' ' &&' ?U = = 7A[?' <A I' = 3?'7>4UA7? $"+$&(F!: &, HHH' (' Z "+F"(\' (="#/' .(,'$&(!: &+)9/9' $ 'B' C&' ' ' ' ' 6 "+$&(!!# "#/ '/ / '%' Z "+F @\' "+! !? "#/' !%&' $&(!: &+ 3 2' # ' J)&'3K' @7' ?4A>CV7' = 3?'7>4UA3CV' = >?8' 4@>4' ?>Q J D -G B ' ' % Z "+F7" \' ' ' '%(=&'+"#$:7' $&&7"#/+' '%,' 3C' ' * ' ' ' B@' @>MM7' 3?3'7&74 ! "+$&& 17"#/ HHH' [M ' % ' Z "+F"' @ \' +&,' "#' !%&' &(7"&' =&+" #' $')'7"$E+' ".7&! ! &#,&' ' ' ' % ' ' <+&#+&7&++'E % ',1# % ')+' KL3',' C' >&& 4@7?7' 4@3@VU?' = I?' '7&7C<7' FA' LCQ34437' 3?' 4@7' @7A47' 6 ! ' KK33' %+' 34@' >' =H(? '7&7C<7' VF' 4@FU' CF4>Q7 I' P% >C' LCQ3H?' = >C5' ! "+$. "2)' 2' 6 e% b. B' Z "+F"' \' ' ' $&"/#' *"!%' (' * #-' "#!&#!" # % (' ' '<' '333' + ' I' @3= 'Q@F'@>?' 4@7' VU7A<FC' F"' @3?' VU3&7 ' I FA' ?F' = 3?'73VC3CV' @7A' 4AU7' 8C3V@4' 4F' M77' ! "+$& & ' 6 ' 8+' +&&' J 'D2 " Z ' $ -! % '' Ÿ +&&' "+ ' "' (#,' J ' (* e ' ' * #/' ! (#+/ &++' ! ' 8"+.&%(=& N' #+!' ee !,' G ' I' ! * (,+I)'+ ' ! % ' ' ' ' ' ; A 5*' >U& '@>7 4' F&B' M7Q7AF<7' Q3 ' @27 7C>C' &7F<>' @7>A<&3B7' = 3<' Q?7 = CU = '5$7>@' @7' M7' = 3?'7A<7' FC' = >C7?U = ' F AU = '@3CVU = ' %' % ' *3' B' J * ' ,%,' 3C' ' @' @ ') ' 7C' ?73<7 ' 4@>4' 4@FU' FC' 4@3C7' U7 3?'7A<7?4' = 3<' = 3C7' Q3U7 ' 6' ! ' ; F&?5' '%+*' 57' FU4A>V7' F'' A3B@7' = 7C ' =X%3 = 3?'7A<7' Q34@' 6FA7' = 7C' ;FCV' ! + '' ' *V ' %$ ' 7+%' -%+/ ' ' ! ' ' %) % %' + =' % ' < $ ' *'-' ' ,+%' "F4' FC&I' 4@>4' 4@FU' M>?4' = 3?'7A<' @7C87C<7 ' ' ' (#,'/% ' $(&' "77 ' ! ' ' 8&! ' / "&$' ! ' .&' :#$!:#(!&' ':#+: ''&++$:7)'%, '@ ' 2>22 '(3" A U&' = 3?.'7A<7' @7C7' @7' BF = 7' 4F' @47 ' % ' & * ' ' J %) ' ; F&&?5' > ' &&7' @>4' $' = (7'>' <>' I'L6A3V@4' ;'>&&7C' Q>?' <FUC' L6FC' @>4C I V@4' ,%D' ?>Q' @7' 8 I CV' @3&' = 3?'7A<7' ?F') '%* ') ' ' % ' 'KK3' K $' 4' 'G' @3?' '><3&' FA7' <FU37' G' Q>' @7' 4A7Q I 4' 3C' @7' ?7' = I?'7A<7' %'%+, ' + * ' ' ; 3C 5' Z73.7 ' Q>?' Q3@' CQ' 'F7?' = I?'7A<7' * 'Q>?' L = .?744R * ' a' %e 'L' =& !% * ' ' ' ' '

6A3CB36>&‘ $ 6$ ‘ CFQ’ F’’ BF4&>C< ’ %)+ ’ ‘ * $ ’ * / ’ RA‘ S>4’ >’ C7Q - ?4>A’ 3? 4F’ 6A76>A7’ ‘FA(‘>’ =3?. VU3<7A’ >C< IFUA’ ?4FA!’ F’’ ”>AB@FB@7M>?’ U6FC’ 34’ 34’ @>4@’ =FA7’ V@4?F=C7??7’ 4@>C’ &3V@4’ 3C’ 34 ’ ;DK;’ 2 @%$ %’ ‘ ,+’ A3<7 ’ >C34I ’ @FUV@4&7??C7??’ Q7A7’ = I’ 3?VU3<7A?’ %*)’ $ ’ + (‘ ’ ‘ ! * *’ %8% ’ ;% %%5 ’ % ’ @’7’ = 3?VU3<7A’ F’’4@7’ = 3C< F’’X>>A= 3&&>’ @>? ’ =3K7< ?F=7’ 4AU4@’ Q34@’ 4@7’ >MUC<>CB7’ F’’ @3?’ ’>&??@FF<?’ % ,+’ ! ’ ! %+’ ’ &74’ K3’ I’ VU<7?3A7’ Q>?’ C>7’ =>C>V7A O$CF4 4@>4’@7’Q>?’>’L7AI’VA7>4’=3?VU3<7A ”+/ : ’2, ”#/ ’ $\’ Z ”+F*” 5 \’ $(’ =”7’ ’ #, : ’! ’8”+. &%(=” : ’ ,”+ ,& ’ 7] ’ ”+ :7& ’ 8 ”+? 8(#(/&8&#! ’ 77F! &(!8&#! ’) ’ ’ ”+, ” &’!” # ZB3+* ’ ’) - ’) ’@*),’ ;5>’ I?A7U&7 B’7K4FAB3FC’ I?VU3<3CV’ FMM7AI’ G’ C7B&3V7CB7’ %+ ’ ? ’ *’ ’ O ’BBK&L333’ U’ *’M’ @UAV@’ = I?VUI<H=C\’F’’4@7’ M>AV7’ 34’ FU7A4@A7Q7’ FC’ 4@7’ 6I&7?’ - , ’ %3 * ! ’ *’ ’ 333’ @RH@’ 7’ ?&7Q7’ $’ 4@F U?>C<7’ F’’ F!<7’ ?>V7’ ’><7A?’ F’’ VA7>47’ L7A4U7’ MIB>U?7’ 4@7I’ 4F!&<7’ @I=@3?’ =I?VI<(V7’ % ’ ;VAH@’ 7’FA=>B3FC?’ F’’ = I?VI<ICV’ z ’ * $ %0’) * ’ ’ %6+T(=’M7’L7AI’C7B7??>AI’3C’ >’BF=7C’Q7&4@’ % ’ $ ’ * ’) * ’ ’ @>;’ S3CV’ BB>’ @AFQ’=3?VI<3CV’ Q7?’?&>C7’3C4F’4@7’ ’73&< ’ % (’ BA’ @ ’ ,’ * + ’) * ’ 7A ’ ’ ,))’ ! FA’ >3&7V734’ = 3?VI<3CV’ F’(?U=’F’’4@7’ ?>3<3?’ BF&&7V73?’ ’ ’ ’) ’C % !’L333’ 7’C7[7A’Q>?’V37C’ 4F’ VA7>4’ =3?VU3<3C’ 74’ BF3C’ @3?’ 6FUB@7?’ Q><’C>’ M3<7’ 3C’ % ’J $ ’F%5’ *’ B4’ 0,’ @7’ 67ALA7?3FC’ F’’ FUA’ 4>?47’ >C<’ = 3?VU3<3CV’ F’’FUA’>?74@743B’3C?43CB4? &#’&’ ”+” #”2, ”#” 7)’% ! ’B”#’ (’ * ()’ ! ’ ”#”+E’ 7&(, 1’ N>4 ; VFR ;’ &.+!& I’ ! ’ 6 ’ #’ ; FR’ F/”7! F/) 7!N& F/&7!’ ’ ’ ’ h’ L ’ 6(= $$&#’&’ 8 ”+? ,&&, ’ ’ ”8& %’% ’ + * ’ ’ 67’ = FC7UA?’ ‘FA’@>3A’ = 3?V3&4’6>3A’ @FA<7?’ P 7?U?R’ FU7A87?4’ 6>3A’ 67C?>’ ?63&4’)’% (’ J ’ @%V$ ’ ’)’ 7 4’ = 7’ >87’ >- = 7C<3?’ ‘FA’ >&’ = I’ =3?.V7&4’ 6 !’+ *’74B’ .3,8* *6 , ’ ; >&5’)% @IC87’ @FQ’ 4@FU’Q>?’FQ47’6I&47’ ’!4@I’&>C<7’‘FA’4@I’=I?.VI&47’ ’] ’C+ * +e ’&3’ 3’’6>4’>’MUAV7?’M7’>44>B@I4 ‘FA’<74’ FA’ ‘FA’FCI’=3?V3&4’)’% + (’ , $ ’ ’ ’ ;%)*5 %, ’ @I?’ =I?.VI&4’RK5U’‘FA-I7U7’=7’\ ! ’# !”+ / : ”F7! ’ 6 ’ #’ ;’ /%’ / / ’ 8 ”+ / ”7! ’ F/&7! ’ Z$’ ’ ’*” 4’ h’ L ’ N’ ’ , ’ * #/Ÿ :+&,’ ’ ’ * ”!%” # 8 ”#(7’ .0 >5 ’ ’C + ’; 5’% %’ @>4’@>U7’3B@’?F’=7B@7’=3?V3&4’Z >K , ’ %+! ’ ,+’ 3C’ FA?4=’ ’ ’ ;%* 5’%) ’ cU7A’@7’?B@FC76’6>4’@>6’=3?V3&4 ! ”+ / : ”2 & ’ 6’ 6 ’ Z ”(’ 3 \’ ”+ / : ”+& ’ ! ’ ”+ / : ”F+&, ’ / / ’% ’$’ 7+ / : ”+”#/ ’ 6 3(4’ % ’@* $ ’ -* ’ ’K&3L’ ,’ FUA’33&4@37’ ’>&?’CU?.’ V5?3CV’ ’”%(7)’S3A8’(FUA’47=7A>A’<3?6I?3CV’ ;O=’+ C ’@*/’ $/* ’KK33’%+’ @7?7’ =3?V=?7<’M7Q34B@7<’ BA7>4UA7?’ `RB’ ’ ’ ’

)' B' J ' ' ;% + 5 ' C F' @7' 4QF' = F?4' ?@FQ I '
@747AFV7C7FU? '>C< ' = 3?3C47A6A74>M&7' QA347A?' F ''M3?' <>I
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`TB') - ! 'F !' ! ' ; 5' , " ! '4@7' >ML?ICV7 '
= I ?3C47A6A74>B3FC' FA' = I ?4> 83CV7' F''4@7??' FA< I C>UCB7? ' %) +'
+ * $ 5' F $ ' ;%)+ 5' U ' %+" ' >44@7Q' '?>I7?' 3C' >' QFA< '
Q@3B@' B>C' >< = 34' F '' CF' = 3?. 3C47A6A74>43FC' @>4' 4@>4' Q>?'
'U&@&4?< Q@3B@' ?>I ' @><' ?>< K) (' ' ' ' ' ' % '
' ' 7' >A7' FM&3V <' 4F' '47 7 34' 'AF = ' 4@F?7' '>&?7' V&F???7' FA'
= 3?. 3C47A6A74>43FC? ' 4@>4 ' = >87' 34' Q@6&&('3C73' 7B4U>&' K*KK'
' ' / ! ' F ' M C7' QFU&<' 4@3C8' >' ?3&7C4' >C '
?@FU&<' M7' L7A I' &344&7' &3>M&7' 4F' = 3?3C47A6A74>43FC? ' % *+'
' ' ' '@ , '%' 3L ' ;% * 5 ' '>A' = FA7' 'A7YU7C4'
B>U7?' F ''>&?7' 67AB7643FC? ' @FQ7L7A '&37?' 3C' 4@7' = 3?3C47A6A74>A'
43FC' F '' A7>&' 7C?7-3 = 6A7?? FC?' %)' 6+ ((' , V' ! '
' ,%% @7' @3?4F&FV3B>&' = 3?3C47A6A74>43FC?' 34' BFC4>3C?' >A7' ?F'
CU = 7AFU?' P74B R
"+"# ! &2 & ! & ' Z "+F"' R \' #&' * %
8"+"#!& &!+
1 ' 9 ' ' ' +-- ' i 8?' ; AF?>A45' ' , ' @7'
&>QI7A?' >C<' ??&'7.BFCB7347<' = 3?3C47A6A747A?' %)+ ' , '
*) ' C4AF< ' 8?' % %' '%,' 7' 3?' CF' M7447A' 4@7C' >'
@>A3?7 ' Q@F = >?>' = 3?3C47A6A747A'F' MA3?4'$FF6C&I'6AF47?&'
>V>3C?4' K))K' ' ' * -') / 'MMe' 3?' ?F&3<' <'7'7CB7'
F '' <3L7A?' F '' 34?' 4AU4@?' >V>3C?4' 34?' = 3?3C47A6A747A?' % ,
' ' ' ! ' - ';% + 5' , +)' F' 6A7?7C4' 7>B@' >A43B&7?'
3C' 34?' 4AU7' BA36 4UA>&' 6UA34 I ' MI ' 7K6F?UA7' F '' 4@7' B>A3B>4UA7?'
F '' = 3?3C473 6A747A?
"+0 # ' ' Q' $ ' ' 0 "#'
' ##&'!' * #/7) ' "#("(!&7) ' ' :#+ : "! (. 7) '
/) ' "# %G' N'$' & 0 8
% + ' ! 'cM ' ' @'B' ' /'3??U7?'@>U7' M7C' = 3?3F IC7<'
030 0 ' I ?HF I C3CV' F '' 4@3?7U7 ' - 6A&'4 2 '@ ' ' ' H33'
'4' 3C' @7A' >M??CB7' = 3= 3B' ! >C?3?' Q>87?' F '3 = 34>47' @7A' PAB'
>4UA7R#' MU4' = 3?HF I C3CV' ?@>67?' 3&<7' QFA8' 6AF<UB7?' F '4'
X) *' # ' ! ' '@ ' C ' %+ ' U4@7A' = FA7' = 3?4<B3CV'
Q@>4' @7' A7><' 3?HF3C?' 4@7' ?>BA7<' "F<I' Q34@' 4@7' "A7><'
* ' $ / * ' %'$$$')4' 4' = 3?HF3C?' CFA' 4@FUV@4?' CFA' QFA<?'
CFA' <77<?' % *' P777' C7K4R
"+0 "277 , & ' %G ' Z "+F7' ; \' 8 " &'
0 "#, &' $' (!"&+' "#' (#' ('!" #' ' $' '(: +&+' $'
('!" #' "#' ('+ :'!
C > ! ' % ' (' K)' ' B ' *)' : ' C' B>?7' 34' ?@>&&' >667>A'
>4' 4@7' A3>&' F '>CI' B4$FC' 4C>4' 4@7A7'@>?' M77C' >' 3?HF3C<7A'
F '' &>3C43' '?' K *' N ' C %)& * ' (' * $ $ ' ' KK ' ,+'
C' >B43FC?' F '' 4FA4' 4@7' 6&>3C43' '' = >I'>&Q>I?' A7 = 7<' I'>' = 3?-'
HF3C<7A' F '' <7'7C<>C4?' MI' 7C47A3CV' >' '' @ * 7+ ' >?' 4F'
4@7' <7'7C<>C4' = 3?HF3C7<' ' P777 / ' MR
! " : 2 , / & ' Z "+ ' \' %$ ' ' 0 : , /&'
* #/7)' ' ! '0 : , /&'"77' $ ' ! '%(=&'$(7+&' "#" #+' $
1 ' 6 ' % $ '3 ' 8?' ,0,' C<' 4@7A7'FA7' CF'
= FA7' = I ??7' 3U<V7' >C I' = >CC7 ' K) (' $ ' ' ' '
*' I*B' ;%))5' %*%' '' IFU' 8CFQ' 4@7' VFF<C7 (' F '' >' = >C?'
&3'7' = 3?HU<V7' @3=' CF4' MI' >CI' ?4A>CV7C???7' F '' @3?' <7>4@'
%** ' / '@ ' J % ' ;%) 5' % ' @>4' &>A7C<FC'
= 3V@4' = 3?HU<V7' 4@7' = F43L7' F '' @3?' A743A7 = 7C4' 3?' 4@7' = FA7'
6AFM&7 ' % %' c ' #' 'C ' I*<' ' ' FQ' IFU'
= 3?HU<V7'U?' QF = 7C' \
. ' %6 * ' ' B' ' & ' "# 0 : , /"#/ ' ! ' $ 8'
* #/ "#" #+' *-
) ') ' ' 5 'B' ' : , ' C<' M7B>U?7' CF' = >C7A' F ''67A?FC'
?@>&&' = 3?HU<V7' F '' 4@3C47' C4' F '' 4@3?' ?4>4U47 ' ;7D<'
'-* ' * '= ' 8?' >VA>' 'VA' FU' = 3?HU<V7'I' FU' ???'
4@AFUV@' FL7 ' >C<' 4@>4' <7&U<7?' IFUA' ?3V@4 ' KI>V' .
!, ' ' FF' &FCV ' = 3?HU<V3CV')+' @L7' ' 4@FUV@4' 4@77'
*"+&' K) ' * ' ' ' ;E: C& ' 9 ' >; 6V' >L7' Q7' = 3?]
HU<V7<' @7A7' FL7A. >A= 7<' FUA' 8C3V@4'Z
' "+0 : <, / &, ' / / ' % ' "+0 : , /"#/ ' 6 * ! ' (#, '
/ / ' % ' N%&#'&' "+0 : 2 , / "# / 7) '%! X
K?-)'@ ' ; ' <7' ' % '%5)+' U?63BIFC' FA' = 3?.'
4U<VICV7' F ''4@>4'4@ICV7' 4@>4'3?' LC77A4>IC7 ' 2 ' ' #'
,)*' %' '%%' L3 ' % ' 7CB7' 4@FU' = 3?4U<V = V' 7C?FA'
%(' ' * ')';%)+ 5' ,'M ' 74' = 7' >AA77<' @3 = ' CF4'
4F' M7' 4@7' 'FA7 = >C' F '' >C I' = 3?. HU<V[<' F63C3FC ' UC&7???' @3?'
A7?FU43FC?' M7' '3A = &I' ?7>47<' ,)**' L6 ' $ * ' * '
' % ' &&' 83C<' F '' <3?4A7???7' >A7' FMCFK3FU?' 4F' 4@7' QFA?4' F ''
= 3?HU<V3CV?' 'AF = ' = >&7LF&7C4' = 3C<?' %* ' '
! (' $ $ ' ' ;3 3)5' ' %+' 3<' @7' CF4' Q3?@' 4F' ?77'
@3?' = 3?HU<V3CV' '>4@7AZ' %)(' # ' & 'C*5B') ' 'K3 '
3?' VA>B7 (&' <7 = 7>CFUA ' ?43 '' '>?' ?F = 7' = 3?HU<V3CV' 67A?FC?'
@>L7 BFC?3<7A7<' 34 ' % ' 36AF ' %' C3 ' %' 1$ <3<' CF4'
A7><' 4@>4' ' >B7' = 3?HU<V3CV&I -' 4@FUV@4' 4@7' YU77C ' , + '
' ' ' ' ' %%$ % ' @7' = 3?HU<V3CV' 'A37C<?' F ''

&3M7A4I
"+0 (2 , / & 8 &# ! 'F0 : 2 , / 8 &# ! ' Z "+F ; \'
#/ ' 8"+!(B&#' ' & =& !&, '0 : , / &8&#!
M ' @ ' '@ ' ; ' <7' ' %& ' 3?3U<V7 = 7C4' 3?'
Q@>C' F ''>' &IV@4' ?U?6IBIFC' 'Q7' 3U<V7' FUA' C7IV@MFUA' 4F'
?6787 '4@IC87 ' FA' <F' I-' 4@ICV7' 4@>4' 3?' A>F34>&&' ?I3 = 7 ' %) '
'6' ' % I' 3 ' ' '% *' F' AUCC7 ' ?F' '>A' 3C4F' 4@7'
= 3?. HU<V7 = 7C4' F ''4@73A' = 3C<7?' '%*')' ' '* ' , $ ' ; % (5'
)' @7I' B>CCF4' B>AAI' F ''>' = 3?HU<V = 7C4' FA' >' A>?@2' ?>I3CV'
Q34@' 4@7 '3C<3' '7A7CB7' F ''>' IFUCV7A' 67A?FC' % * ' ! '
+ ! ' * ' *3K ' ;% *'5 ' , *' @7' M3>?' 4@U?' B>U?3CV' = 3?HU<V.'
AF7C4?' 3C' B>??7' Q@7A7' 34' 3?' B@7B87<' MI' <3A7B4' 67AB7643FC '
B>U??' VA7>47A' = &?HU<V = 7C4?' Q@7A7' <3A7B4' 67AB7643FC' B>C '
CF4' B@7B8' 34 ' j
"[2 , / & ' Z "+F"' R \' #&' * % ' 8 "+0 : , - + '
' (! 'C' 8 & ' * / * !' %& ' C4AF<'6 ' KKKL' FA'
>&&' = 3?HU<V = 7C4' > C<' BA3 = 7' BF = 7?' <7>4@' 4F' 4@7' = 3?HU<V7A
' ' 8 B (7' N8 "?+B I ' 8 +Y 6 8 &!F ' 8 "!"' &7 '
F/ (7' V 8 &, "' (7' 8 &+!" (77 ' 8 &!"&(Q7&' 8 &!!&/ (7 '
8 "!"' (7&' 8 "+' &' 4' 8 : - ' (7 ' 8 &+F ' 8 &!F '
8 "!' %F 8 "!7" ' 8 "+B (7 FB&7 F ' (77 \ - !B : 7 ' Z (.
Q > ' $ @7%' N7 ' (77) ' $ 7 ! ' $ 7 ! 4B' $ '
! ' *&"/%' %&' >V!%' '&#!' $ 8 +'"#' #/ ' ' 8 &' 8 +!7)'
!% : /%' '$)% ' / ' $ %)% ' $)%B
> ' #' (."(#' 8 &(+: &' $' * &"/%! ' &O : "=(7&#!' ! '
@';' ((!+' '(. : !' ," %& 8 +' "&' ' &+ #, "#/'
#/7"+%' * &"/%!' "+' /"=&#' = (" : +7)' $ ' , "$$& &#!'
' :#! "&+' (!' 2 8' V>' ! ' V ; ' / ("#+')

'$ 7)%! 'N>44RI' @65' K3 ' ! >C>C?' >C<' >' YU>A47A '
3?' FC7' 343V>&#' C<' L3 ' 343V>&7?' >C<' >' M>&'7 ' = >87' FC7'
LC77 ' ; 7 ; = . ' @ $ % ' L3 ' L33 ' N>6>; ! ' 64V U7A1'
3443V>&#' M73CV' >' UB8>4' F '' F&<' >C<' >' 4@3A<' 6>A4' >64V
' @ ' ! ' ' * (' % ' ' 6V @7' 7<3B>&' 3?' >'
A>B@ = ' >C<' >' @>&!' ; 73<C J ' ' ' ' ! ' ' ' ' ' ' ' ' ' '
@73A' &FQ7?4' 73V@4' 3?' >' 3?BF 7Q@7A7F '')' = >87' >C'
UCB7 ' 4DA = ' + ' ' % ' N>V6@I' ' L ' K3L ' @35' @7'
= U?B>&' 4@AFUV@' >&&' 7A?3>' 3?' 4@7' ?>= 7 ')' <UC8' 3' = U?B>&'
6' = U?B>&?' 9 <A>= ' ; <=7@' ' *I ' , / ' ' 5V@' @7'
B@77A>' 4' ; FA' B>A>45 ' >?' >MFL7' = 7C43FC7<' 3?' 4@7' , +4@' 6>A4' F ''
>' = 34B8>&' ' ' ' ' '

8 , (H , 9 !

7 4 7 - - ' " (' B ' B ' %3 $ 5 ! , ' 3) ' * ' ' * ! ' % -) % , ' $ *) % ! , ' UC<7A?4>C<' BFC] '7AA7<' FC' >C'3C<3L3<U>&(' F4@7A'4@>C' @3 = ' M I ' Q@F = ' 4@7' ?7AL3B7' Q>?' A7C<7A7<

"+7 ' (F ! " # ' Z "+F‴ ; \' "+ 7(' "/#/ >' ?)) K' J ' J * ' ;% + 5' $' , ' ' >=' BFC'3<7C4' @7A73C' 37' CF' = 3?3FB>43FC ' K2(*' ' * ' * ' 34 ' 3 ' :" 3 ' KK ' @7' U = M7A' ' Q>?' FA3V3C>&&I ' 4@7' A>C?BA3M7A[?' ?&3&' F ' 4@7' 7C' # ?F' &387Q3?7 4@7' = 3?&FB>43FC' F ' 6@FM3?' %' % (' * ' * ' ;% +5 ' , +' 3A4 ' 3?' >' ?FA4' F ' = 3?&FB>43FC' F ' = >447A' 3C' ? = >&&' 6>A43B&7?' %) (' * ! ! (,) ' ' % ' % 0% ' 3?&FB>43FC' F ' 4@7' V7A = ' <UA3C V' 347' VAFQ4@

Q$$"+7 2 , - & ' D[' Z "+F7' \' %' ' ' 7 , / &' 7(' &' "# (" * #/' 7(' &' ! ' ! ' 8 "+7() %)*)' * ' ! ' F % ' F' % *%0+' F?4' FA' = 3?&F<V7<' M I ' >' 7???CV7A?' = 3?4>87' ')' FA' *' MUC<&7?' F ' ' >AB@ = 7C4' FUA4' F&&?' R' - ' % ' - = ' %+)' 3?' >C' >?63A3C V' FC7' P ' >' ?FU&R ' Q@>47[?A' 4@7' 47C7 = 7C4' C' Q@3B@' 34' 3?' = 3?] &F<V7<' K >*' + ' *' B' % ' ! ' KKKL3 ' 3?&F<V3CV' = U?3B' 3C' @7A' 6343&7??' MA7>?4

! ' "+7 1B ' 6' Z + ' ; \' "#$: 7 7 B"#/ ' 'L + ' * '-' R ' L3<7' 47&&74M' 3C' @3?' MF8' C?>=6&7' 4FUB@7C<7' F ' = 3?&F8

! ' "+7 2B ' Z" "+ ' \ ' ' ' ' +"# "# 7 B"#/

BK>FF' ' ' * ' $' ' B@' @>MM7' ' 3?&F874 ' % ' L - ' * '-' ')' @>4' 4@73' QF&<7' 3?&F87 ' QM7A' 4@>4' 4C73' C7' ?B@F&<7' 6 ! ' *' '' = 3?&F8 I CV7' @FQ' 34' (4@ ' ' 7A< CFQ' @>?4' 4@FU' @7A<

' 7 B' : #$(= : (.7)' * ' ')'%+ ' + ' ' ' '@ ') ' * ' C<' CFQ' ' >=' = I ?.' &F8 I <' FC' G' &FUA7<

' ! % ' N &&' O : !+ I

% * - 9' J ' * $ ' * ! 06 ' **&,' 4F' = 3?&>I # 4F' = 3??# 4F' 67?' 47 = 6FA>A3&I ' !0 * & & ' F * ' b **&,' 4F' FL7A& FF8 ' C7V&7B&3L7&I

$ "+7 2 & ' 6 ' Z "+F7' ; \' ="7' !&('%"#/' ' ' : #+&7

%' X ' 6 >') ' ' L33 ' ;% 5 ' !&>7?B&3B A>' = 3?&>A>' B) % $ % ' $ ' ? 4 *' =' = 3FF3C' B3 F * ' , , 0 , ' ' 6 % , ' = 3?&'>A>R ')' K>FF' ' * ' * ' , ' , &B@' 63C7' PF" M7&&7R' 3?' 'A7 = 7<' FC' 5$A7' 'F&<' Q3?7 ' C' 3?' @7' <7'37?' 4U4@43CV' >C<' = 3?&FA7

! ' "+7 2+& ' 6 ' Z$' "+F7' ' T' * ' @ X" +&,' ! ' &#,& ' ' ! * (% >' 1 ' :* & ' K3L ' ' I' MA74@7A7C ' <3?BFU = ' FA43<7C' 2e- ' = I ?&F?7<I C ' U&V ' ! * ' =' 4@7' M7A47' F ' '4@7' 6U6&7

! # ! "+7 2+& , ' / / ' %' 6 ' #' R' 8)+7 +&! ' Z$' "+ ' 0' h' = ' " ' $' ' $ * ' .7(8 & \'

"+ ("+&, ' .7(8 &, ' - 1')'%++ ' F %' * $ ' KKKL33 ') ' ; <<34 ' 5' A747' = 7C' >A7' MU4' V&F?7<7 ' >C<' ?=>&7' = 7C' MFAC7' <FQC7' >C<' = I ?&FL7<7' 2 %! ' = 3?&F?7<7' 2 * ' $ 4=' + ' C& ' + % , ' , ' 3C' C%6 'C& ,' ' ' ?Q747' QFA<3?' C7<<7A' Q>?' B&F?74 ' 3???IU. >UC4' 7U7A2(<' = I ?&F?74

! ' "+7 2 & ' 6 ' Z$' "+F‴ ' h' @ , ' S \' ' ' '7 =&' "# (* # /' * ( ) %+ '3C' @* ' 'B' '@* $ ';% 5 % +' 6>4' ' = I ?&U'7<7' ' >?87' = 7AB I

! ' "+7 2 = "# $$ ' 6 ' 6' 6 ' Z$' "+F‴ ' 5' h' @ , ' 6 ' "+ ("+& ' ,& &' "'(!" # %' % ' + * ' ' ,*) ' 3??>U ' >C<' VAFB@3CV' >&?U>' "> &7.' M347 ' = 3?&FU3CV' * ' F % 6% ' ?&I>C<7A' >C<' M>BM3473CVR

"+7 2 B ' ?' %"&$7)') ' Z "+F‴ ; \' "+? $! : #&

>2 ' F 6 ' % *G' ' *' + ' % 4' Q>?' @3?' 3?&UB8 7' 4F' = >AA I ' 4@>4' Q>B87<' 3 ' 7 ' %) + *' ? A '' $ +) &, ' >' 3?@>6 ' FA' >' 3?&UB8 ' %*%% ' *+ ' ,0 % '(' ' *' + % ' *' " U4' 4@7' 3?&UB8 ' 3?' @7' <3<' ' M7&37L7' @3 = ??&') 6.7' #' F ' ' ' 3 ' B C '* ' @>' B>C' @7&6' = 3?&UB8Z

' "+7 : E ' B' ' ' ! ' 8 &&!' * "!%' 8 "+$! : #&' %) +*' + (') ' 4F' 3?&UB8 ' 4F' 3?@>6 ' K F ' / (' ' +) &, ' 4F' = 3?B>AA I ' CF4' 4F' 6AF?67A ' % ') ' ,'@ ' B ' %+6'2 = \TBB' '(+ ' @7I ' >A7' 4F' A3<7' M I ' 4QF' <3'37A7C4' AF>< ?' 4FQ>A<?' " F@7 = 3>' 4@>4' 3 '' FC7' = 3?&UB8 ' 4@7A7' = >I ' ?43&&' M7' >CF4@7A' 4F' = >87' 47A = ?

7 "+7) ' . + ' $ 8' $'

"+ 8 (2, & ' /%' / / ' (#, ' / / ' %' Z 7+ ' @ \' (, 7)' * ' #/7)' 8 (, & ' FF ', &$ 8 &, ' 8 "+F+%(&#)'%* ') ' % ' 3K ' 2C * ' $ + 4' ,%*' 157 '>B7' Q7?>Q 'U&G = I ?=><7 ' 3B(B3 ' *) ' */* 2=\ ZL64' , *' ' 7I CI <' B@>A4A7' 3C' FUA7' >&&7' 'FA>3C<' BFC'73'77' C>=7' = I ?.' =>><' %+ ' ' F * ! ' % +0 ' ' =>C' Q@3B@7' Q>?' VA7UFU?&I ' = I ?=><7 ' % ' ' ' G '? ' ! ' 3?=>3<' = FC?4FUA ' K;(F' ' + ' /) ' 33 ' KL ' %*,' 3?' =3?.=>><7' A7?M I 47A?' %) ' * 333' ,+' UMHF3C7<4F' &3 = 63CV' 6F???3M3&3437?' '' =3?=>><7' @U=>C' C>4UA7 ' ? K' J ' + ! ' - ' L33 ' %% ' @7' ?3 = 6&7' >3&7>C?' Q7A7' CF4' = 3?=><7 ' FC&I ' UC=><7 ' = 7C

7 "+7"?" (EBA ' 2' *' ('V' (' % ' 8 (B&' . (, 7)' $. ' ' : # 8 (B& ' , & +& ' 6 ' 8 ' ', "+!: . ' #&+&7$' : !' #&+&7$' : ! + ' & * ' ' ' KKKL 3C')& + ! ' ' + ' '4 ' ,+' " 7'?43&&7 ' VFF<' Q I '3" ' YUF4@' 4@7 I ' 4@7A7' F ' = I ?=>87' I FU' CFV@4 ' X .,' ' - ' @* $ ' KKL333 ' % ' @>4' FC< = 3?=>883?' (7 <F' >=7C<' % * ' C+ ') ' ! ' ' ' U&I ';% ,5 +% @>4' Q7' @>3<' ?6F83C7' F ' ''@3?' A>3B7'4@>4' Q7' @>3<' = >3<' @3?' A>3B7' >C<' Q7' Q>3&<' = 3?=>8' @3 = ' %)% ' ' * ' ' ' X * ' 5 ' %) ' 77' M>U7' = 3?=><7' FUA' ?7&U7?' >C<' >A7' CF4' CFQ' &387' LC4F' 4@>4' Q@3B@' F<' BA7>47<' L?' % ' / (' F' $ %)&, ' $ %& ' 3 ' F' ?@>67' FA' 'FA = ' 3 = 6AF67A&I Z' >66&37<' 4F' B&F4@7?' ,' F' 4AFUM&7 ' 4F' <3?4UAM#' >?' 1 3CC>' = 3?' = >87' I FUA?73&' FA = 7 ' % *' : ' $ * ' (' ' U66&!?' L ' 7' BFU&<' 4@A776' >' &77' 3C' I FUA' 7B7' >C-' CF' = 3?=>8' @3 =

! ' "+"# ('B"#0$' 2"H' $' 6 ' Z "+F7' 5 \' (, ' 8 +"!" # % ,' F+, % ! ' A' , , $ * ' ! ' 7CLFI ' '3H' C<' Q@7A7' C7<7' 3?4F><<7FA' 7&&7?<74A>I' >A<FC' F ' = I ?= (3CV7' V&><&I ' 4@FU' M I = ' 6A>I

! ' "+ 8 (2#(/ $& ' 6 ' % 0B ' Z > F ; \' (, ' 8 (#(/&8&#!' "8 & ' (, 8 "#"+! (!" # %' %*K)' #' ' %' ;%* , ,5 3 ' '' , ' @>4' 4@3?' 3?] >66F3C4 = 7C4' '6AFB77<(' 'AF = '>' 3?= >C>V7' F"' FL7AC = 7C4'

"+ 8 (2?" - &)' Z "+F7' = 0' %' ' (#, ' ' ' 8 (#(/&' . (, 7)' * ' #/7)' 7+ ' "+ 8 (E#(/&, ' / / ' % ' "+ 8 (2#(/ "#/' 6 ' 6' (#, ' / / ' %>

63A' 0 : ' + $ ' V ' ! ' 3L ' KL33 ' :" * @7' " U?3C7?? ' F" ??7 = M&37?' QFU&<' M7' 3C' <>CV7A' 4F' = 3?=>C>V[&' >634' ' $ $ * ' % ' ;%) 5 % @7' &7AV I ' = 3?=>C>V7' ?F = 743 = 7?' >C<' 4@7 I ' = U?4' ' 4F&<' F ' ' 4@73A' '>U&4?' K ; (O' - ' * ' B ') ' ?' 'FA' @3?' 3?=>C>V3CV ' @7' = U?4' >BBFUC4' 4F' @3?' >?47A' + ' C ' 4 'C ' ! %' ' # 3K ' , +' @7' VFF<' F ' '4@7' BF = = UC34 I ' '?F' 'FA = 3<>M&I ' 4@A7>4] 7C7<' 3C' 4@7A7' = 3?=>C>V3CV' @>C<?') 9*9' 0 # ') ' ' ' = 3?=>C>V7<' 7?4>47 (<#(/&(. 7&' %

)99*' & : ' * ' %B ' +&' >Z' ' ' '6 ' ' ' ' ' ' ' ' ') 6

"+ 8 (109(/&8&#!' Z "+F‴ ; \' (, ' "8 & ' 8 (#(/&8&#!' ' (, 8 "#"+! (!" # +>>' " ' % ,' % ' FL ' @7' A7>?FC' @7' @>' <' 4F' ?U?67B4' @3?' = 3?=>C>V7=7C4' F ' ' @3?' = FC7I ' 3C' A7&>C<' >63A' 0 : ' FL, ' 'K3K ' :' , , ' UB@' 7LF&U43FC?' @>667C' CF4' U6FC' 7L7&I ' &3444&7' 3?=>C>V7=7C4' 3C' 6UM&3B8' ''>3A?' gV ' " ' $ / ' % $ ' +) ' &<' = 3?=>C>V7=7C4?' 4>K>43FC?' C7Q ' E (9' ' *5% ' , ' @7' = 3?=>C>V7=7C4' -F " 4@7' M&7??7<' 4@7>4A3B>&' 67F6&7' Q@F' <7&>I ' 7L7A I ' 4@3CV' 4F' 4@7' &>?4[' g4V4' 0 : ' ' ' ' ' ' ' ' 333 ' +, ' C' 4@7' CV&3?@&' ?7AL3B7' = 3?=>C>V7=7C4'>C<' &>CVUFA' Q7A7' V7C7A>&

"+ 8 (2 : (/& ' Z !+F ' R \' ' . (, ' 8 (#(/& ' g645' 3C' ' >34&>C<' ' ! ' ' ;%* 5 3 ' L3 ' % +' 3?. ' =>C>><V7A?>C<&=M7E&7A?F"'4@7' F = = FC' FF<' X*XX ' /) ' F ' , ' Z ' ' QFU&<' '>3C' >?8' >C I ' F " 4C7' 6A7??C4' 3?=>C>V7A?>C<&=M7E&7A?F"'4@7' F = = FC' FF<' X*XX ' /) ' F ' , ' Z ' ' QFU&<' '>3C' >?8' >C I ' F " 4C7' 6A7??C4' 3?=>C>V>V>3C' FC' FUA' &>V7Z' ' & : ' K) *' ' ' - ' ' 8?' ' ,+*' ' &FCV' >C<' UCMAF87C' 67<3VA77' F ' ' = 3?=>C>V7A?' >46@' @+6)' / / ,)' U&I ' 7 FC47C4?' ' @7' 3?=>C>V7=7C4'>C<' 3?=>C>V7A?' 3C' 4@7' >A' 76>A4=7C4' >4VV' & : ' * ' % ' ' ' 7' QFU&<' 3C<' '4@>4' 4@7' = 3?=>C>V7=7C4' BFU&<' M7' -'>AA7?47<' 3C?47>?<' F ' '4D7' = 3?=>C>V7A

"+ 8 (2## & , ' %' ' * ' Z "+F7' 6 ` 77F' 8 (### & , ' : # 8 (### 7)

>65V' & % ' ;%) ,5 ' 7L ' ,) ' F = 7' 63C3CV' >C<' = 3?=>CC7A7<' @UCV7A ' >V3A' 4 ' 1 ' ' J $! ' % ' ;% ,%5 RV 3B' &387' = 3?=>CC7A<' <73C?' P??<F3CV?H ' g4;V $ A' $ % ' ' ! ,' UCM7BF = 3CV ' +$ 6 ' F&E "+ 8 (!9"""&=+' . (, 8 (### + g63V' @ & ' %/ ' 3L ' 3 ' :%* 5 +% ' ' @F67' IFUA' FCFUA' Q3&&' 7KBU?7' = I ' 3?=>CC7A?' 4F' Q@M67A' M7' FA7' IFU ' M ' ' J ' ' ' ' $ ' 4K ' +>' ' <F ' ' M7?774?@' I7A' 6>A<FUC7 ' 'FA' C (7 ' VA3&' 'F&&I 7' >C<' = 3?=>3CC7A?

"+ 8 $!E B ' ' c "+F‴ ' $' ' $ $ % &%' ! ' 8 (B' N (' +%&& I' * #/7) \'

$ 7 ' ' 8 (B&' (#//:&++' N $ ' #'+2' I')'g ; :A' * & , ' 'KK3K ' `M1@ - ' ''@3?' BF = 6>C I ' C7L7A' >A7' % Q>?' 87C<7 ' 6FU' M>?47' 5D7 = 3?=>AB3<

@ ' % ' ' 8 (B ' # !&' ' , &+"/#(!&' * #/7) ' 7+ ' "# (' 7& ' % (="#/' * #/' 8 (B"#/+'

%' >R5R' ' e '@*, * ' !' C& ' L ' 3 ' 8?' %% 0%' C' >' ?3<7' P ' \6>V7R' >' 47A' = 3??7' =>A87<' Q34@' 4@7' CFU = M7A' F ' ' , + ' Q@3B@' ?@FU&<' @>U7' M77C' = >A87<' ' ' J g633' ' , - ' * ' ' ' 3?' MH7B43FC?' >4' "3V. &&I >CB7?' ' ?F = 7] Q@>4' UC' >3A&I ' 4A>C?BA3M7' >C<' 4@7' >V7' = 3?=>A8-<' gVAA O' M ' ! ' - ' * ' G ' % %' @ I ' ? >4UA7' 4@U?' <3?VU3?<' >C<' ^ U>&34 I ' = &?=>A&B[<' Z % + ' % , ' * ' ' UV ' 0K' 4' <F7?' CF4' = >447A' 3 ' \@7' M3A<?' >A7' >' 4A3 ' &7' = 3?=>4B7<

"+ ' : (2 "(-& ' Z "+ ' ; \' #' : #+ : "! (.7&' 8 ("(/&' ' "+ 8 (2 9)' K: ' (#, ' IHD&I

P' 4 ' ! $ ' ' * ' ! (-2=\MB4' 7'Q>?' C7L7A' 4@7' ?>=7' = >C ' 7?67B3>&&I ' ?3CB7' @3?' &>?4' = 3?. = >AA3>V7' X ' % ' >' U&I ' 0,' @7' >M?UA<' QFA<?' @7' = 3?=>AA37<')9+* $ & +! ' @ * ! ' @ * ' ;% +5 3,E' @7' QF7?' ' F " >C I ' BFU6&7' >BB3<7C4>&&I ' FA' F4@7AQ3?7' = 3?=>AA37<' 3?=>?7 ' FM?' ' FA = ' F ' '

"+ 8 (E! ' "C' R-' Z +F ' ; \' ' M><' 8 (!' %' M> >' # ' / ' C% % '3A' 3L ' 33 ' AV4 ')' 3?. >4B@7?' 4>K4 ')6-9' % ') ' 77' IFU' C F 4 ' 4@7' = 3?=>4B@' 4@>4' 4@7A7' 3?' 3C' FUA' = 3C<?Z' M ' +' 4 ' ' : ' BU?' ' $$' K) ' @>4' = M=>4B@' M7V>C' 4@7' = 7C<3CV' F" ' @3&36' ' % / @ ' % ' >A ' 0%' @7' ?>UB7A' >' = 3?] =>4B@

"+ 8 (E! ' 77 ' ' Z "+F7' " \' % ' ' 8 (!' %' "77 ' . (, 7)' ' :#+ : "! (.7)' &+ ' "#' 8 ("(/&' /% ' ! ' .&' "77F8 (! ' %&, ' "77F8 (!&, ' 7+ ' 7" (8 (2! %&, ' / / ' % ' "+ 8 (2! ' . "#/' 6 ' 6

1 ' - . (/ . ' , ' & ' 'L ' K ' +/ ' ' >=' ?4U<I3CV' MFQ' 4F' = >4B@' 4@7 = ' ' FQ' 4F' = 3?. = >4B@' 4@7 = ' Q7A7' @>A<7A' >655' ' 3/ ' ,' @ ' '33 ' +' ;%) 5 , FQ' 6A7&F?47AFU?' >C<' = 3?=>4B@7<' 3?' >C' 7A7B47<' BFUC47C>CB7' >C<' >' VAFL7&&3CV' ?63A34\' >654' 3C' C+)) +)&' ' ; 3?4' ' F = = 5' $, ' 7A7' >C<' 4@7A7' >' = 3?=>4B@7<' U3&' MU4' CFC7' BF = 6&747 ' (>6 ; 5' 4 ' *) ' % ' C7' 7K>=6&7' F ' ' = 3?. = >4B@3CV' Q34@' >C' C'3<7&&' g6V4' # ' ' ' 3L ' UA7' 4@>4' ! >B7' >?' = 7>C4' 'FA' FC7?4I ' MU4' 7>L[C' C3?. >=4B@[<' 34' EI><' 0 6) ' ' ' 0A' ' 4@7' 7 = M7A?M7 ' CF4' = 3?=>4B@4' CFA' UC?3V@4&I ' >4 ; 4' ' 3 $ ' ' ?+F ' % ' % @>L7' @7>A<' 67A?FC?' = 7C43FC7<' MU4 ' 3 ' ' 4A37<' $ 4@3C8' ' ?@FU&<' 3C' ?F = 7' B>??7' = 3?=>4B@' C>'C7?' >C<' F63C3FC?' E ? ' 8 ' % $ ' ' K&333 ' ;%) # K*' ' = 3?=>4B@7<' 6>3A' ' &7U?3C3>C' ?477<C>' X * ' 5 ' ' & ' %+,) ' @7' M7&4?>A7' F ' ' <3 ' ' 7A7C4' &7CV4@?' ?F' >?' 4F' = 3?=>4B@' 4@7' ?7B43FC?' >?' 4@7 I ' >A7' A7LF&L7<

&#'&' "+ 8 (-! ' %" : &#! ' T ' ('

4R4' 4 ' < ') & ' * ' ' K333 ' , ' @7' = 3?=>4B@.' = 7C4?' BA7>47<' MI ' 4@F?7' @I 6FBA3?3?7' F " = F<7AC' &3' 7' Q@3B@' P74B R ' ' + 8 (2!&, ' /% ' / / ' (#, ' / / ' % ' Z "+F7' @ \' 77F 8 (!&, ' "77F 8 (!' %&, ' : #+ : "! (.7)' (7"&, E >?' . ' 2 R.' C * ' : * ' % ' ' ' ' ' @7' Q3C<FQ?' B>A7] 'U&&I ' = 3?=>47<' CF' 4QF' F " ' >' ?3E7' % ' ' ' @7' Q3C<FQ?' B>A7])*)' ' ' ' ' ' ' ' '

3C' FMM7A<?' $ ' ;% + 5 ' + +9 $ <3<' CF4' &387' 4F' QA347' 4F' IFU' Q34@FU4' 4@7' MFF8' >4' = ! 7 7&& (Q ' &7>?4' ' ?@FU&<' = ?3A7 /' =7 = M7A' % +%' 7L $ß&02A00 KB3K ' ÷ @>4' <F' 4@7 I' B>&&' 4@7' BFCL7C4'Z ' ÷ 4' 3?' >'M>A<' QFA<' ' = ?3A7 = 7 = M7A' -

F' 3?A7 = 7 - ?U&5A>CB7' %

>R ; (2 ' F ' 'N>RVR\' 554' FU' QFU&<' CF4' @>U7' =7' 4AU?4' 4F' = 7 = FA3?' 4&4' ' Q7A7' M7447A' 7K67A47 ' &7>?47' F'<7C] 43 = 7?' % @>667C' M I ' = 3???' A7 = 7 = MA>UCB7' 4F' M77' >MU?7<' % %

' ' e ' ' L7A I ' = 3?A7 = 7 = MA>CB7'

3C4F' Q@3B@' @UAA I ' FA' '>3C4C7??' 6 i UCV7<' @7A

-'%-,*"72# 07 $ ' DX$ ' ,* 1',' S' *J '

' ' L' ' / ' (+! ()

%'%, ' G ' ' %* *' 7&&7' 3B' BFC' QFA<' >'47A' QFA<7' G' 3'' $7' &$8C8I$$>4' 3B' = 3?A7 = 67' 6U' ?&FC<' >I7IC' >C<' <F' = 7' BA7 = 67

"+ &2# , & ' ' Z "+F7' > \' $ ' ' ' &#, & ' FA' 3C47A6A74' 3CBFAA7B4&I ' ' "+ &2# , & "#/' ' &'

4))#' ' , ' * -') / ')+' @7' = 3?A7C<A3CV' F'' 4@7'

A3V3C>&' >A43B&7?' %)*+' ! ' % / % ' ! ' 33' ' $?U6.'

6F?7' 4@7I' >A7' MF4@' = 3?4>87C' >C<' = 3?A7C<7A[<' 4@7 = ' &7><7C' <>A4?' %) ' G ' % ' ,+ ' % + ' @F7' Q@F' ?F' = 3?4FF8' >C<' = 3?A7C<A7<' 4@7' <7??3VC' F'' 4@7' ' A74@A7C' K (3' @ ' *-' G ' '3L' %* ' 1 FU4' <7LF43FC?[3?' CF4' >' = MA7C<7A3CV' MU4' >C' >AB@>3?= ' ?3VC3' I3CV' ÷4@7' FMH7B4?' F'' I FU4' QFA?@36[' % ' % / (' % ' !7M' +) 0%' 7' QFU&<' CF4' >< = 3?4@>4' @>87?67>A7' QFU&<' >&&FQ' " UA&3 (7' 4F' = &?A7C<7A' >= &74

"+ & 6 (E ! ' " \' %$ ' ' & &(! "#' &'!7)

%)%' ' % '% ' ' ' '3C' +) % *' ;%) *5)%" 7B>U?7' $ Q3&&' CF4' = 3?4>87 ' FA' = 3?. AB67>4 ' I FU' ?@>&&' @7>A' 4@7' 7<343FU?' 3M7&&' 3C' 4@7' 6AF67A' 4A = 7?' '4@7A7F' ' %;(' ' ' ')* ')' 7' = 3?A767>4?' >C<' = 3?>66&3?' ?F=7' >??>V7?'F'' = 3C7 %' %*K ' G '' $ '33';%*,+5' $,)' FA<?'4@7 I'?>3<' = 3V@4' M7' = 3?UC<7A?4FF<' = 3?A767>47<' >C<' <7C37<

,*"7O!?"-9' 6' D ,* ,' N

H' ' < ="7' & !1 ' :#$(= : (.7&' & :!&' 6 '

%+% . , '@ ' *' ' *, '33' K3K' 34@FU4' ?6F4' F' '4A7?.' 6>???' FA' F'' M&>= 7' ''= I?A76FA47'3C' @ I C<A I CV7' F'' FUA' C>= 7 ' % ' ' 1 ' ' 'M' C I = 3?A76FA4' FA' 7L3&' M7@>L3FA' F' FUA6>A4 I @7A74F' FA7' A7 = 7' (' @7 I ' ?@>&&' F' 47C' &3V@4' 3C4F' ' = 3?&3B3CV' F'' = >C I ' >C<' 4@7A7M I ' V7 4' = 3?2' A76FA4' %) *' !) '(' ,'UM = 3?-A76FA4' F''@3= ' B>= 7' ' AF = ' @3?' E7>§' >V>3C?4' >M7&&3>C4?= ' ' $(7+&' ' & #& :+' & ! ' (+' $' !%&' (' !" #+' ' '%((' !&' $' (' & + # % ' ' 0%9 $@ I C<7A' FC7?' 6AF = FB3FC' M I ' = I' = I ??7' A76FA47' % '' ' ' + ' 'K3L ' *' " 7B>U?7' 4@7 I ' MAFUV@4' L6' >' = I?EA76F' 4F ' F'' 4@7' &>C<7' 4@>4' 34' Q>?' 7U7&&' %' %)+' ((' ' + * ' -' % ' ' 8?' ;%*K%5 ,)' @7' 83CV' >4' '3A?4' Q>?' &F4@' 4F' &7C<' >C' 7>A' 4F' = 3?A76FA4?' >C<' B>&U = C3??' F''>' = >C' &>47&I ' ?F' Q7&&' <7??AL3CV ' %*)' ' ' ' * ' ! ' ' %,' @7' >66A7@7C?3FC' @7' &>I' UC<7A' F'' 4@F??' = 3?A76FA4?' %) ' ' ! & ' F ' KL333 ' L3 ' % ' C' ;<7.<7.' >= 6' = ><7' >' ?= >&&' = 3?CF = 7A ' = 3?A76FA4' F''FC7' QFA<' Q@3B@' Q>?' 47C3M&I ' = 6FA4>C4 ' % %' @ ' @ ' %) ' 8' '++' ''4@7I' >A7' >&&' = 3?A76FA4?' ' Q@>4' 3?' 4@7' L>&U7' F'' >C4@AF] 6F&FV3B>&' 7L3<7CB7' '

. * "!% :!' (!''7&' "#' /&#& (7"D&, ' :+&

% '! # ' '6 ' KL33' ''$@><' 'FUC<' 4AU4@' 3C' <7<7' 4@7?' 4MICV I ?' Q I B@' M I ' = I?A76FA4' 4@7A' Q I 4@I FU' Q7A7' BF = ' = IC&I'?>I<' % (%' @ (" ' '33' L33 ' ;%) ,5 , ' @7' FC7' BM>AV74@' 4@7' F4@7A' Q34@' QFA<?' F'' = 3?A76FA4')) ' 6 'C ' ' /;j V ' ' ;%) ,5 6R' FU' = >I' @>L7' A7B73L<' = 3?A76FA4' BFCB7AC3CV' @3 = ' %*+ ' 2 ' % %';% %E5' && ' ' @>4' ' ?@FU&<' 'M7' 4@7' FBB>?3FC' 'F'' Q3<7C3CV' <3'' 7A7CB7?' M I ' &3V@4' CU?A76FA4

7 "+ & 1 ! ' ' Z "+F'" \ ' % ' ' & !' N(' 8 (!!& I' & #& :+7) ' ! ' V3L7' ($(7+&' ' "8 & $&'!' (' ' :#!' $' N(#' &=&#!' +!(!&8&#!' "#" #' '!%&' 7"B&I '

)'%+?Q' @ ' *$ / 'C '?' ') $'>= ' QFA4@I ' FA' 4F' M7A7' 4@7' M&>= 7' ''>CI' 4@3CV' M7A7' = 3?A7(A47<' M7' % ,' L ' * $,' %) '%%% ' @3?' 4>&7' M7B>U?7' 34' Q>?' ?F = 7Q@>4' = 3?A76FB47<' M7' FA7' 73?' 7?4' <FQC7' CFQ'"' 4AU7' 7A' = 7' %' g6; ' "6' ') '-,' * ' ' ,%) +,5 ' ' 7' = 3?.A76FA474@' 7AF<?' F'' .?6A&CV' ><' <7?B7C4' '%*,,' $ 'J '@ % + ' 8?-' ;"F@C5 ' ' @7A7' @>?' M77C' @7A74F' FA7' = UB@' >MU?7' 3C = 3?.' A76FA43CV' 4@7' <3??>7?' ;<=W 'G ' 'C ' ' 8?' % * $) ' 3?' M7@>L3FUA' ?B>C<>&FU?&I' = 3?A76FA47<' M I ' ' 7CC74 ' ;<DK' ' * '' * -' C % ' ' 3L ' , ' 3'&7AFI' @><' ' M77C' = >83CV' = 3?B@37 ' M I ' A76FA43CV' >C<' = 3?A76FA43CV' 6A3] L>4?' BFCL7A?>43FC?' (

! ' . ' ' #+!' (' ' * "!%' "#$' ' &+' 7&' 6

% *+$N % * % > ' / *)% / ' 'P @7 I R' MF>?4' 4@7 = ??&U7?' 4F' M7' 6AF'???FA?' F'' 4@7' 4AU7' >I 4@7' >C<' = 3?A76FA4' 4@77' 4F' 'F&FQ>' >'<??' <FB4A3C7' % *' J #"' & '(@>' % '+' FU' = 3?A76FA4' ' 747A' M73CV' >'&(A<' F''4@7' @3V@7A' @FU?7 ' 8&#!+' ' "#" #+' $' N(' & + #I % % @ (' * ' C%, ' *'' 3C' ! FK7' ' 2÷ ' ;% %*+*0%' @A3?4' M3 = ??&'7' Q>?' = 3?A76FA47<' G' '>&??&I ' >BBU?7<' % (' ' % * ' ' % %%% FU' Q@F&&I' = 3?>87' >C<' = 3?A76FA4' UG' %) ' ' ' -' * ' G' %,*(7' B>&&?' = 7' >C' UC' >3A' <L7A?>AI ' >?' 3'' ' @>' < = 3?A76FA47<' @&F ' ;<74' 2 * ' ') * ' ' % ! ' 'L33 ' ,% ' @7' 6AFM>M3&34 I ' QFU&<' ??7 = 4F' M7 ' Q4@>U4@' ' 7AF?U?' @>?' M77C' = 3?A76FA47<' ' $'4' '?67>8' 3&&' $' ! ' ?&>C<7A ' 6 '

B= K 3 *$ - % ' 6'33 8?'%, 0,' 7?47'@7'?@FU&<' V7U7' F4@7A' 'F&87' FBB>?3FC' 4F' ' = 3?A76FA47'@ I = ' 'FA' >C' @I6F.' BAI47') S ' % -* ' 'L 3 '%+ ' ' = >C' 4@>4' C7U7A' I7&' 3<' ;>?' @7' LFUB@7?5' = 3?.A76FA4' I FUA' A>B7' %) ,9' 3C' !7AVU?FC' G' >C?FC' ') ' % ' ;% *5 , ' >= ?7' "&>8&FB87 ' <3<' = 3?A76FA4' >C<' ?&>UC<7A' 4@7' Q3'7' F'' &7K] >C<7A' <<&7 ' 3C' B>&&3CV' @7A' ?@767' ?47>&7A '

' ' ' ' V3L7' (' '>&?7' & !' / -(4 ' 6

% *,' + ' = 3?A76FA47' F'' >C' F4@7A ' % * ' @ ' ' *'-+ ' % $ ' * ' % ' '4F' ?&>UC<7A' >C<' = 3?A76FA4' M7' >' QFA87' F'' A&V@47FU?C7???' 96 D' ' 1 ' % ' * $ $ ' RM @7' <F3CV?' Q@3B@ '4@7 I ' <F7 ' = 3?A76FA4' F'

' "+ & E !&, - H ' % ' "+ & E !"#/'5-6 ' 6'

K93 ' / ')' ' 6' '34 ' , +' F''FA4@' 47&&' MF87 ' &7?U' M7' 3M I ' ?67<7' C<' ?>U7' 4@7' >&Q>I ' 'AF = ' = I?A76MA4 I CV >6A\' # (' % % ' 3 ' ;%) %*5 , ' 4' ?@>&&' >667>A7' VA7>4' @FCFA' 4F(' FUA' C>43FC ' >C<' = UB@' ?@>= ' 7' 4F' 4@7 = ' Q@F' @>U7' QAFCV<' 34' Q34@' 'FA = 7A' = 3?A76FA43CV?' 63A' @ # ' +$ ' V ' !' 'KK3 ' :') ,' @7' QAFCV' U<V = 7C4' 4@>4' = 3?&7><?' U? ' &377' 3C' = 3?A76FA43CV' U6FC' 4&37' L>A3FU?' F = 6>A3?FC?' F'' 4@7?7 ' 4 ; 6' L ' ' ' ' %' KL3 ' ' + ' ' = 3?A76FA47<' 7K>VV7A>47<' >C<' FAC>= 7C47<' A7B34>

"+ & 2 !& ' Z "+F7' R' \' #&' * % ' 8 "+F' & !+

' L (') *(' --) '%%' ;% 5 *' 3?@FC7?4' = 3?.' A76FA37A?' PFA3V ' $ % !) * =' >R4 ;' '@ ,' * + ') ')* ' 7A ' %' ') + ' F' ?&F67' 4@7' = FU4@3?' F'' = 3?A76FA4>A3?' (%), +' L # ' %' +6 '%%+' ?' 4@3?' = 3?.A76FA47A' >C<' = 3?.7K.' 6FUC<7A' F''@3 = ' '3A = 74@' >V ; 4' 2 ' % %' ;3 3K5 ' ,) +' 74' = 3?A76FA47A?' ?>I' Q@>4' 4@7 I ' Q3&&

"2 & &+&' : ! ' ' Z "+F'" " \

' %' ' ' & &+&#!"8 & 7)' '"8 & $&'!7) ' ! ' /"=&' (' $(7+&' & &+&#!(!" #' ' (' ' :#!' $ ' ;3' @F?7 ' Q@F'@>' <'FC7' 4@7 = ' 3&&' F''3B7?' >C<' = 3?A76A7??C47<' 4@73A' B>AA3>V7' 4F' 4@7' S3CV ' %;(*' L ' $ * ' * ' C ' 3K ' (' >I>C' <F4@' 7C<7>] LFUA' 4F' = 3?A76A7??C4' F<' 4F' 43FUM&7>' FU&?' %*,)' ! * ' F + '333 ' L333 ' @7 I ' @>' <' ?F' @FAA3M&I ' = 3?A76A7??C47<' 4@7' 7>C3CV' F''4@F?7' U4@FA?' 4F' F?47A34 I ' % +)' 1 ' ' ' ' K333 ' *' F6U&>A' 4A><343FC' V7C7A>&&I ' = 3?A7] 6A7??C4?' 4@7' >B43FC?' 'MU4' CF4' 4@7' B@>A>B47A' F''347?@7AF ' % * ' 3 ' ' ' % 'KK ' ,' 7' @>' <' M77C' @3 = ??&'' = 3?A76A7??C47<' 4F' @3?' BFUC4AI = 7C

%6B ' %)*%' 4 ' %$ * ' '%,+' @3?' 4@3?' 3?' @7' ' A' <F' = I' 7I7?' = 3?A76A7??C4Z' % ,,' ' J &,' ' ! 7M'),' ''$@>' = 3?A76A7??C47<' Q@I' CF4' 6AFL7'34Z ' $("'7 ! ' & &+&#!' &'!7)' ' (,&O : (!&7)' (+' (/&#!' $$"''(7 & &+&#!(!"=&

K F 3 ((C'F* K \RB' ' @7'BFC?434U7CB37?' *'Q@3B@' = F?4' F'4@7' @3V@&I' 7<UB>47<' 67A?FC? (&FCV >A7' 734@7A' UCA76A7??C47<' FA' = MA76A7??C47<

' "+ & &+&2#!&,'/ / '%' "+ & &+&#!"#/' g! H' 6' (#, HHH ' %

K) ' @>4' / 0 %, ' ' UB@' Q@F' 6A747C<' 4F' M7' B&7>A' 'AF = ' 4@7' = 6U>43FC' F4' 3?A76A7??C43CV ' %) ' ' ' G' (' 7' UC<7A?4>C<?' 4@7' A4' F'' 3?A76A7] ??C43CV ' %* ' '3C' 45+) ' ;% 5%% ' 3+F &@>< ' 6A7L3FU?&I ' A7>< ' 4@7' = 3?A76A7??C47<' 6>??>V7' 4F' A' @>&=7A?' % *' @ % ' % 'F ' , 'FL' % ,0%' 4' P>' BF = 6>CI R' B>C' A7BFL7A' 4@7' 6UAB@>?7' = FC7I ' 'AF = ' 4@7' 633?A76A7??C4&CV' L7C<FA?

8 ,' ' + & &+&: ! (2!' # ' Z "+F'" ; \

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%)+*' 3C' U?@Q ' ' * ' 3L ' ;%* %5 ' +' @F?7' Q@F' @>L7' '3 = 6AFL7<' >&&' F66FA4UC3437?' ' MI ' '>&??' UVV7?43FC?' 3?A76A7??C4>43FC?' >C<' F4@7AQ3??' 'FA' 4@7' <7?4AUB43FC' F'' 4@3?' A = I ' K))K' -' ' ' * -') / ' ;%)* 5 ' @7' = 3?A76A7??C4>43FC' = <7' MI ' 4@7??7' = 7C' F'' 4@7' ' 3M&7 ' %* ') ' /) F ' ' 6B' UA' U3<7?' <7B73L7<' U?' Q34@' 3?A76A7??C4>43FC?' >C<' '>B43FC?' % K+' 1 ' 3C' UAQ ' /-)=\ZZ4' ' &?A76A7??C4>436C' F''>B4?' 3?' 4@7' F = = FC' 6A>B43??' F''4@7' QA347A?' FA' C7Q?6>67A?' K (' . ' ' @ ' % ! , C&' @ * / ' % G' L ' ,)' 'UAB@>?7A Q@F' = >87?' >C' >B4U>&' = 3?A76A7??C4>43FC' Q@3B@' 47C<?' 4F' = 3?&7<' 4@7' ??4&7A' % * ' + ' '@ 'KKL ' + $ $C7L7A' = 7 4' Q34@' >' = >C' Q@F' MFA7' = 3?A76A7??C4>43FC' Q34@' 4@FAFUV@' B>&= C??

@ ' <' #' &'!' ' :#$("!%$:7 & &+&#!(!" #' "#' !%&' ' (' "!)' $' (/&#!' $$"''(7 & &+&#!(!"=&!' 2 ' ' '>43AI

"+ & &+&2: ! (!"= & ' 6' Z "+F'" R \' #& * % '$("7+' ! ' & &+&#!' !%& + ' (' ,(,' & &+&#!(!"=& K)>' G' * &' 6+' ',)' = 3 ' ; >???&$5 ' M7447A' A76&I ' 'AF = ' 4@>4' = 3?A76A7??C4>43L7' F'' C<3>C>' % *' @ % ' % F ' E ' 6A' 0%' C43&' 4@7' B@>3A = >C' >667>&7<' 'FA' FA<7A' @3?' 66FC7C4?' QFU&<' CF4' @7>A' FC7' F''4@73A' = 3 A76A>??C4>43L7?

8 "+ & &+&<# ! (!"= & ' %' Z "+F'" 6 \' ! & 7)' & &+&#!(!"=&' K*-4

OP ') + ' ' * ' ! %' ' 8?' %* % & & ' %+*' @7' ' ?&>L3?@' A>B43B7?' F''4@F?7' = 3?.A76A7??C4>43L7' ''AU4?7' K 47' % ' ' %' 6V ' @7' YU7?43FC' M7' FA7' 4@7' BFUC4AI ' QFU&<' M7' Q@74@7A' 4@7' A76A???C4>43L7' FA' 4@7' = 3?A76A7??C4>43L7' MA>CB@' F''4@7' 7V3?&>UA7' ?@FU&<' 6A7L>3&' >3A(" ' N ' ' 5% * ' ' C47A6A74>43FC?' 'U447A&I ' = 3?A76A7] ??C4>43L7' F''4@7' A7>&' = 7>C3CV' F''4@7' 6@7CF = 7CFC

"1+ & &+& - # !& ' Z "+F'" R Q' #&' * % ' #0"+ & &+&#!+

K) '@+ / 0 %, ' '%' @7 I ' = U?4' CF4' 4>87' 34' >= 3??' ''>?' 4@7 I ' Q7A7' = &?A76A7??C47A?' 4@7C(' 4@7 I ' >A7' ?7447 = [<' ?3A7-#A7??C47A?' ?43&&' (%*+ ' 1 # ' ' ' % %' ;3 9335' ' %%Q3&&' >C<' 6>???FC' Q7A7' <A7><' U&' = 3?A76A7??C47A?' %*) (, (' / ' * ** '*-<+ % ';% 5 ' > Q I 7A?' >A7' '4@7' 6&7><7A?' >C<' 3 = 6&7><7A?' A76A7??C47A?' >C<' = 3?A76A7??C47A?' ' F'' FUA' &>Q?' % % ' # ' ' 764' 3C' % $ ' ' ;<' 3K')' &&' $@>L7' 4F' '7>A 3?' 4@>4' ?F = 7' MU?I = 3?A76A7??C47A' = >I' Q@3?6?A' 3C' 4@7' 7V7C4[?' ?>A

"+ & : 2!& ' D[' 6 ' Z "+F'" " \' % ' (*' &+!' 8 (!&' & #& :+7) ' 7+ ' "+ & :!!&,'/ / '%' * #/7)' & :!&,' '&+!' 8 (!&,), ' ! ' @ %) ' * ' ;%), 5' , ' 3?.<F = 7' B@F?7' 4@7A7' 4F' M7 7' = &?A76U47<' A>4@7A' 4@7C' UA3F?3437' ?@FU&<' M7' ?>43?'37<' > ' ' % $' F74' 8?'% ' ' % ' 74UAC' Q7' CFQ' ' F' >' &3V@47A' ?4A>3C# >C<' 'AF = ' 4@7' V>&&7AI ' ''4@7' U4B@' F74[?' = 3?.A7?7 = M&>CB7?' ?>??'3C4F?' = 3C7

0$$"+ 8 & ' 6' Z "+F'" ; \' ! ' "+ ,& 7)' ' #, : ' ! ' 7"=" #/' 8 "+' #, : ' ! ' "77F' #, : ' !&, ' '" &/ : 7(' 7"$&' &9'&++' 6

C' YUF4 ' %+)' >66 ' 3C47C<7<' 4F' M7' 4>87C' >?' 4QF' QFA<?' ;?77' ' % 4' A7C<7A3CV' ! ' $ % ')'>;AA' '(*,'* ' MFQ' = 3V@4' = 7AU7&&' 4@7' = I87&&' F'' = I' = 3?A7Q&7' ' U4' @>4' QFA47?' ' 6>4' @(A7' &FCV7?' CF' &FU7' F ' @I = ' @>4' <A7???3?' 'FA' = I' <7A@7' ;KW7' + ' ' %' % ' ' ' I''A77C<7?' ?73<7C' LC.4F' = 7' 'U&' F'47' I' = 3?' A7U&7' = 7' B>U?7' QF&<7' >' $'!' >;4;' ' %6 ' *-' * @' %%%' K3' @7' BAI = 7' >C<' = I?A7Q&7' F'' @3?' ?FC7' >;3;' P777' ('(3'MR' , * ' @ , ' % ' / ' 0+ ' 3?.' A7Q37' 3) + ,' +3+ ' >695' . ' @ $ % ;%)%+5 *+ ' @>U7'?77C' @FU?77?'>?'U4' F''?UB@' 6AF?434U4?'>?'4@7' ?B@FF&7?' 3C' ! A>CB7' >A7' 'U&&' F'' B@3&<A7C' @7 I ' 4@7A7' L77' = UB@' = 3?] AU&7' A3F4' >C<' Q>C4FCC7?

@' (,' :7&' ' / =& # 8&#!' N $' ?' +!(7&' &!' I ' 8 "+/ =& # 8&#!' !%&((!" #' $' 8 "+ 8 7"#/' ' ' #? ,"!" #' $' .&"#/' 8 "+ :7&, ' %&#'&' N $!&#!' (' +!(!&' $' ,"+ ,& ' (#('%) ' & .&77" #

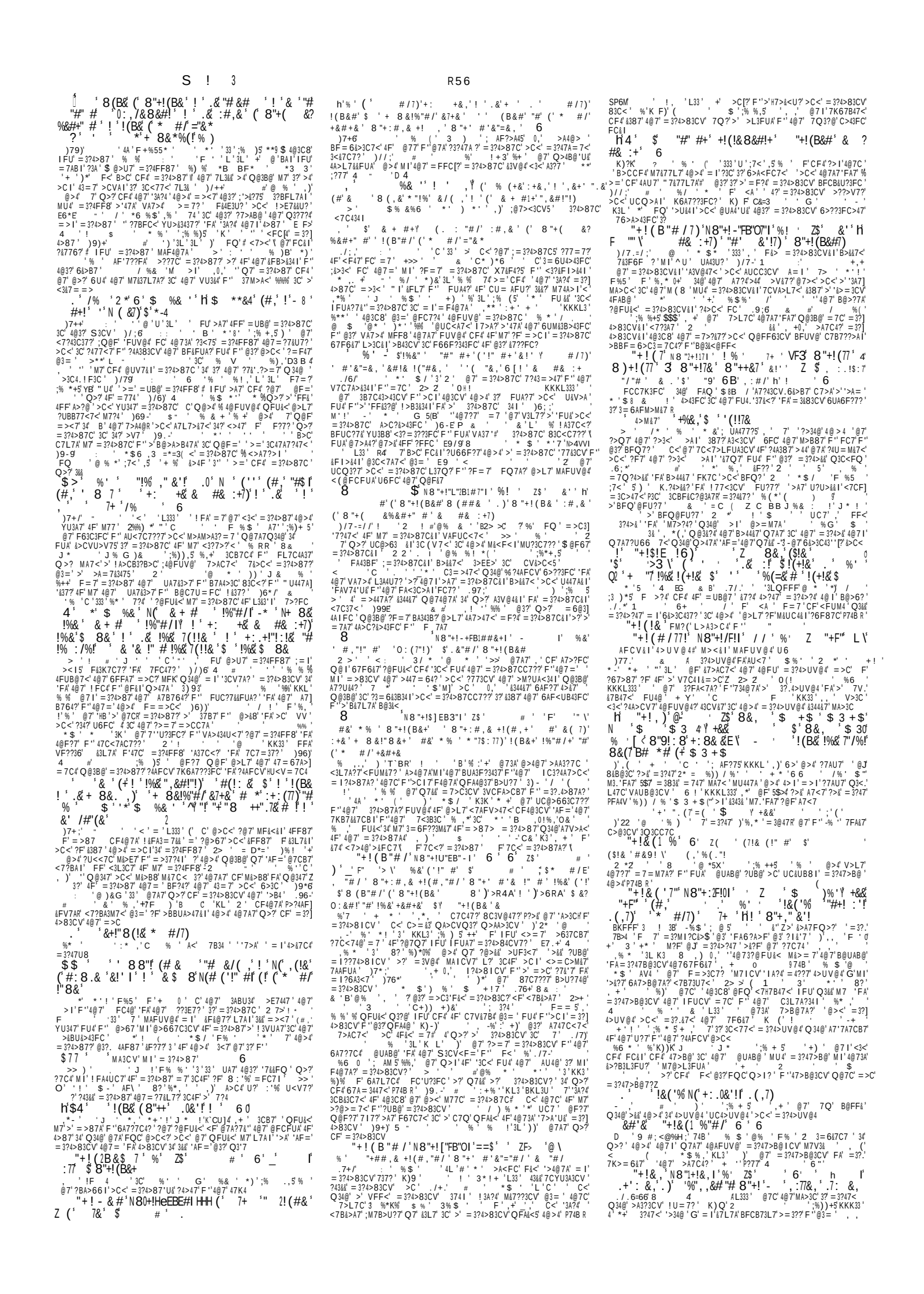
;=33' @ ' ' ! 3L ' @7A7' Q>?' 7U7A7' FC I ' BA3?47C' 8 I CV7 ' 6>4' @7&<7' ?Q B@7>C' @FU?7@F&<' ?' 3B@>A<' 3C' @3?' A7Q = 7' @FAU' = I ?7AU&7' F'' * / ' ;>;RA' * ' * -'@% 0E' @7' MMF4' >C<' FL7C4' 3?' 3C' VA7&' <3?F >B3FC M I ' 4@7' = I?A7U&7' >C<' <3&>63<>B3FC' F'' <3L7A?' MMF447?' X +X ' N ' 3C' % $ * ' @%/ ' %+,' @3?' 4CI?A7Q3&&' >C<' MA738' U6FUC' 4@7' " FA<FUA3?' >6RVF4' 3C' C+ * ' (' % , ' ;% , 5 ') ' ?3AU&7' 3?' M7447A' 4@>C' CF CF7 ' ;77D' ' ' ' ' ' ,*% C<' 4@7' &FU<' = 3?F?' >AA' A7 = FL[<' (KI>?7 . ' ! , '% % ' @7' @7>L[C.MFAC' = >3<' CFA = FU?' A3F4' >C<' = 3?] AU&7' ?UAL7 I [<' PDDD' 2 ' ' ' ' ' $ ' L3 ' ;% %5 ') ' @7'>U4@FA34 I F''VFL7AC = 7C4' @>C<' M77C' >= F?4' FAVF447C' <UA3CV' 4@7' &FCV' 6A7L>&7CB7' F '' >C>AB@ I ' >C<' = ??.AU37 ' ;<4< ! ' '@ ' K3K ' ?' 4@7' 4FQC' 3?' 3C' = 3?AU&7 ' fQ7 4QF ' >AA I ' Q3&&' B>AA I ' @7A' @F = 7 ' ;<K;' L ') ' ' ' 3C' ' FQ' , $ ' 33 ' ;% * 5% ' @7A7' 3?' ?UB@' = 3?AU&7' @7A7 ' 4@>4' 4@7' BFUC4AI ' C7L7A' B>C' M7' YU374#' 67F6&7' >A7' ?7C4' FU4' 'FA' 4@7' 73 = A7??' 6UA6F??' F''V7443CV' U6'AFQ?

' * !' N(7+ ' 66* ' % 4' * -' + (' #& '% +&#' ! ' &+",&' =& ' !%&' % *+! 8 (+' / (8&+' (#, &=&7+' "#' >' / &(!' 8 (#!+' % :+&' 6 ' &9' ' 77' "A>C<' @*/+ % ' ' ;X % 5 $ *' ?7YY # ' ' > = 6 (C' ! ' '?% ' !% +$;% +%5 ' %%) ' %%* X+ ' 3C' 3) / %' *)%' ;X %5 ' F' 3CV&7I ' &FA<7' F'' = I?A7Q&7 ' U6FC' >' 6A7?4 ' O d ' g ; 3@ 6 ! ' , F' 3CV&7I ' >MMF4' F'' = I?A7U&7 ' ' >RV@' P?77' @ ' c(%+' >R' ;ADD <D' + ' ' * - ' ' %) *0,' C' = FC<>37' 4@7' FUA4@' T3> CU>A37 ' 4@7' ?>3<' &FA<' F'' = 7A&7' <3?6FA4?' B>= 7' MI ' Q>47A' 4F' _FC<FC Q@7A7' @7' Q>?' A7B73U7<' MI ' >U?7' &FA<' F'' = 3?AU&7' 4F' F@C' >3C>A<' FC7' F'' 4@7' ?@3A33'7?' F'' FC<FC' %) ' $. ' 3C') * ' N>4gV\' ' 9 $ V3U7 ' A77 &7>L7' 4F' Q7C' I &FFC<' = I' AU = 6747A ' V7C4 ' 4F' M7' F-(F'' 3?AU&7' F'' >&&' VFF<' A<7A?' <UA3CV' 4@7' 4Q7&L7' <>I7?' >6R ; ' @ $ ' &% eM' @>4' @A3?4 = >?' 4@7' 7 = 6&7' 6>A8?' @>< ' 7C?4>&&7<' >' 37U47C>C4' >' 4@3CV' Q7' BFUC4AI ' &F&8' B>&&' >' FA<' F'' 3?AU&7' >66 ; ' ' ' ' ' ' 7' 5@5 @73A' >?47A' F'' 3?AU&7' >4' @A3?4 = >?' P3 /5' ! ' 66* ' K3L' ' @>3&' >' @>&&\' 'FA' 4@7' L7C7A>M&7' ! >4@7A' FQ&7V&>?' 4@7' &7>AC7<' FC8' F'' 3CU47.' >C<' 4@7' 3V@4' 7L7A7C<' MMF4' F'' CA7 ?FC' \R

. ' % ' -' (#, ' -

>A3;' @ ' ! , $ ' '33' FU7' 3?' >' FA<7' F'' = 3?AU&7' >C<' 877674@' @A3?4 = >?' 3C' = I' BFA6?' ' >74= 1 ' ' ' +) ' % --' ' 33' ' ' ' = U9 4' 37' @7A7 ' +) ' U?4' ' IFU' >A7' &FA<' F'' = ??.AU&7' ' ' C<77<' = 31' AU&7' 3?' FC&I ' 3C' 4@7' C3V@4' 966 ' ! ' $ ' ;%*,*5 ' ') ' @73A' VA7>4' >?47A' F'' 3?AU&7' &3L7A' P AF = Q7&&R' >4@@' 6 ' C %) 6 ' % 'KKL3 ' ,*' &3CV?MI ' Q@F.' 3?' CF4' = 7A7&I ' &FA<' F'' = 3?AU&7' 3C' @3?' (@FF&' MU4' = ?>47A' F'' 4@7' A7L7&?' 4F' 4@7' L3&&>V7 ' ;<AW ' * ') % ' 'L33 ' N>4R@I ' 3A' @7A7' U?7<' 4F' M7' >' ?Q>A = F' '4@7?7' ? = >&&' >66>A33FC?' 3C' CF <>I' 43 = 7#' >C<' Q7' B>&&7<' 4@7 = ' B@3&<A7C' F''4@7' FA<' F'' 3?AU&7' 434' S ' L (' F' ! '' ' % ' 'Nce' 4@7' Q3C<?' >= ' 4@7' ?4AFCV' B>6A3B3FU?' FC7 ' 4@7' &FA<' F'' = 3?AU&7 ' ?!2 ' *G' * -' $ + ' NL' # ' &F : +&I ' $&+!'' =" !"&+' +: ' %' (+' !% +&' &+", &, ' =& ' .)' (' , ' $' "+ : 7& ' - ' 1 (' % ! ' %) * ' ' %%' L333 ' % , ' @73' PEBA(>B@ = >C7?&' BFU7447' CF' ?3V@47?' CFA' ?@7Q7?' F'' = 3?AU&7?' CF' <3?VU3?3CV7?' CFA' 7C4A7&U<7?

"+ # 27& ' ' Z "+F'" " \' 'K' %' ' ' 8 (#(/&' ' ' #! 7' . (,7)' 7+ ' - >5 ' 3C' % $ /* (' J & ' ;%) 5 ' %*, ' 67' 'FU&7' '7C<7 ' (4' = FC7' VF?4&7' = 7C' M7V ?' 6FAFU' 6A7Q>I ' 6FC4E' F'' 6A I <7' 6>4' = 3?A7Q&7' M7A7' Q3447 ' P=D0' @ ' @ ' @ ' ' ' 3K ' ' FB@7' QF' QFA4@' 6>4' = >C' 6>4' = I ?.A7U&7 4@' Q3447 ' ;=3W L * ' / - ' '%* ' @7A?UB@' 4@3CV' '>&&7 4@' FL7A>&' @>4' 7CI' 83CV' @3 = ??&'' = 3?A7U&7 ')' >;6A' ') ~ ' ') %' @ * ' % ' UB@7' 'F&8 ' >?' = 3?A7U&7' 4@73A7' ?67C<ICV ' ;A = W ' ') 0K' '' IFU' = I?AU&7' IUA' ??&'7' I ' F U' = >I 7 ' B>4B@7' ?F = 7' <??>4@' 4F' 4@7' @F67' F' '4@7' = 3?AU&3CV' '7Q ' ' ' ' ' '



- ' D F ' '' ' ++ ' 1 7&& A ' " UAVFCZ '1 3?47A' >4' 4@7' 7C<' F'' >F I7>A?' ' % Q3?@' IFU' QFU&<C 4' B>&& =7' 3?47A- @' #& *% ' "+' &##"!7&, ! ' .& (, , &++&,' '+ B&# $' #7)' (+ FFFF %*)+' J ' %, , * -'F ' "- ' 3' %"+' =>H7?41' , : . ,' =7' >' SC3V@4' 'FA' IFU' 4F' =>87' =7>' 3?47A'Z K (' @ ' ;3) 5' 3 >' &>3C' 3?47A' @3= ?7&" @7' P 344R' @><' =><7 ' =FA7' &FA<?' @><' >CI ' 4@A77' =3C3?47A?' @>4' @><' 6A7B7<7<' @3= ' %)+' ')*' ' '33' ' @74@7A'4@7' 7A?3>C' 3AE>'7K6A7???7' >' A3CB7' FA'>'=7A7' 3?47A 4 ' +' ($ 8' $(, , &++# !' $ 77 *&, ' .)'!%& #(8&' ['! ' N ' 7&++ &+ &'!$:7 !%(# !%(!' !"!7&I ' *' #7)' % % *) (' ' # ' ** ' * <+% ' ;% 5' ' %' ' = U?4 ' 47&&' IFU' 3?47A' 4@>4' =>447A?' >A7' =UB@' B@>CV7<' %* % ' ' %' 3K' 333 ' ;% ,5 ' ,' A?' " 7&@7&< ' AUCC3CV' 3C4F' 4@7' 6>??>V7 >CVA3&I'B>&&7<' FU4' P4F' 4@7' B@>3A] =7CR' :- @>4' <F IFU' <F' @7A7 ' 3?47A?'Z[% +' + * ' G) 0 * !' ' ' '6* %$(' % % */ B' 1 FF<' =FAC3CV' =3?47A '?>3<' F=3C3BU?' K)>' @ * ' C *G @' 7A' ,' ' *e '=' >1?' @7' !1 [<' M7447A' B>&&' >V3C H' >1?' ?@7' 1' @3C8' &387&1' 3?47A' % %' @+') ' ,' >C ') ' &7>??' 3?47A' Q@7C' >A7' Q7' VF3CV' 4F' V7 4' 4@AFUV@Z' ' ' ' ' ;@FA?? 5?' A3<7A ' N^' 6' ; I' 6 ')'K)-F 3C' ' ' FA7' G $ % & ' ;% 5' ') ' @7' @FA?7' >C<' =3?47A' I>3AF'=4@>4' '3A?4' BF=7?' FL7A' 4@7' ?BF3A' >4' 4@7' ?>3<' >&CU38' F'' >3?&>I7 ! "+!& N 8 "<+! 0I DH" %'&&?) ; ' 6 ' 8+\' (+'# " ,$ 7+ '/% ' 8 :+! ", '6 8&+! &! -' 8"+! "!-' 8)+!(! ' 8"+! ! Z$' $ ' $ / ' ' .& #&'&++( )' #&&,$:7' #+!' "#$' '7(:+&' '(.+ 7 %+, +') ') ' : * ' ;% %+5 '*' C<7' V3'' 34' = 3?47A3?' ?7BU&>A' 6FQ7A' M7' B>&&I 4' @7A4F' 3C' ?U66FQ>&7' >C<' @7&63CV' F'' @>&I83A8' Z(3 FF' ? ' 'B' C% & ' N/7) 5' >E&' ' @' @ ;%) +5 ' ' @7' @FA?' 6A78I<' >?' @7' Q>?' QF<7(' 74' = 7?4FA74' 4F' ?6F4' @7 =' CF4' (% + ' ' ,,,' '' 34' = I ?43?A' Q7' ?@>&' VUI<7' A' &7<7' IFU '4@AUV@7' >&&' 4@7' 6>???>V7?' % ' C/ ' ' ! * ' +' 7C' 6UC<' 43AL7&3CV' 'C>L7' @73A' C<' =>3A' Q@7C' =3?47A3?' IFU' BF= =>C< ' ! ' < ' ,,,' L33 ' % ?' 'FA' = I'C>= 7 '34' = 3?4A74@' CF4' 4F' 47&& . ' J % ' $ ' N(' & + # ! ' ' + 8&!%'#/I' *%(!' #&&,' '+' !%& &$ '%' 8' ! ' *%)' #&&,' %&' L' 7+ ' J % ' $ ' N(' !%'#/IL' %(!' #&&,' '+' !%& &$ ' '!' L')' ++ ' * &' ' L33 ' +' @>4' = I ?4A3?' R$7' 3C' (F<7' FA' 3&&7 ' F'' = 7' 4F' = 7&&7' - J ' ' B! * ' KL3 ') ,' @>4' = I ?4A74@' @ I = ' 4F' 7<I '37' B>A4>V7Z' % % 3C' % ' %) % ' ' 5' **' ^ U@>4' = 3?47A3&' 7C' 3C' 4@3?' 7>V7' ?738' FU4' >C7' C7U' 3C47A&A74>43FCZ' % ' ' $ ' ;% + 5 1 ^ U@>4' = 3?47A<' U?' 4F' @>L7' >' ?3VC'Z) ' @ ' * + 'BKKL3 ' U<7. =>C ' YU@>4' = 3?47A3?' >&&' 4@3?' = FQ>?Z' * ' ' ' #' @' $ ' %*' @>4' = 3?47A?' = 7 ' FA' 4F' 7K6A7??' I ' 6A7?7C4' FL7A4I 4 ' $ I%'#/+' .& #&'&++( ) ' #&&,$:7' &O:"? +"I&' #+!' ,(!' $ & + # o P ' / ' C +) ' KL33 ' ,% ' C<' >&8 IC<' F4@3A' >66>A>3&&' @>4' = IB@4' >L>&&' FA' H734' = I ?473A' 3&&' M>&<' B>?47&& ' %' + ' 3% ' ! ' ?' = 3?4A3?' C7U3A7' C>= 7<B I C7' 'FA' = >33<' FC' 7A4@7' %+K,' %) &' ' * ' %) ' ; >3C7' % +5 ' &&' 4@7' ?4U'&'7' F'' 4@7' ?4>C7' 4@>4' = 3?47A?' = FA7' 'FA' 4@7' = >8 I CV' F'' 4@7' S3A87' F'' S>4A&8 ' + ' ' ' ,' ' "&>?7' ?FUV@4' >&& 4@>4' I = ' = I ?47A7<'4F' QA347' Q34@ ' %' % ' # $ % ' :" &>A;C<35' %+' 4'>&&' 4I = I ?' Q@7C' ?UB@7' 4@ I CV7?' ?@>&&' = I ?47A % ' ' %(=&' #&&,' $" &O:" & %+)' ' ' + ' %G' $ ' ; 5' ,) ' 3'' = 7' 4@3C8' = 3?47A = > \' ?>3&' @>L7&7L7' 4F' 6AF<UB7' =>') /* ' G ' ' , ' K33 ' , %' 7' = I ?47A' CF' ?6FCI ?' @7A7 ' >4' FUA7' =>CV I CV')' %+* ' + ' J % %) '3&& ' ,% ,' >AC7?' >C<' @FA?(' YU@3&8' 4@>3' = I ?47A I 4' 3C' Q7A ' % K ' $ % ' , ' ' K&3 ' &3 ' %%*' FQ' 3?' 4@7' 4 I = 7' 4@>4' = >?47' = 3?47A' 4@7' % ' L ') ' % ' ;3&& 5') ,' @>I' YU@3&8' >A' @>3&' 4@>I ' = ?47A' CF4@4' >C7' &7B@' % ')' $ ' 3 ' (' ')* ' ' % , ' ! FA?UA7&37' Q7' = 3?47A' C>' >V3?4A>4' %*, ,' 2 (' ' C* ' ' ' %+) ' FUC43CV' Q@>4' 4@3CV?' @7' CFQ' <3<' = 3?47A ' %6 * ' %+ ' C& ' 3% ' ! ' F ' ;" >CC>4 I C7' & 5 , ' C<' V3' 4@>I ' = 3?47A ' 4F' = >8' A7?BFUA?' % *,') ' %' >A ' 3C' @ C+ ') ' ;% * ,5' ** ^ U@>3A' ?U67A>MUC<>CB7' F'' ?4>C3?' 3?' 4F' @7&6' L4@7A3?' 4@>3AQ34@' 4@>4' = 3?4A>A3? $'#', "!' #&'&++( )' *' ! *' + 8&!%'#/' 7+ ' *"!%' &7?" +"+' $"#$ (K++F' / %6 '*-' R' ' ?>3&' ?F' FA<>C<' >4' 5$FU ?>3&' CF44' = I ?47A' 4F' M7'>' 4@37'' CF' = FA' % + ' ' + ' ' ' ' *+ ' @ ' @ ' %*' ' ;>C&I 5' @>4' Q>I ' 67AB@>UCB7 ' I 7' ?@>&& C>4' = I ?47A' F' VF' 4F' @7U7C' Q34@FU4' >' V&I ?47A' $ %' OMP ' ' ' D 34?BF44375' *')* ' ; 5' ' ,' >' = >C' = 3?47A34' 4F' 4>8' '73A' F''4@7' A37' F'' FUV&>?' % ' ' ' +' * ' ' ! 3A?4' YU@7C' @7' = 3?47A4' CF4' @7' = 3B@4' 7' C73<?' >C<' = >I ' CF4' CFQ ' %(=&#&&,' 2*-4' 7+ ' (++' *' 6 ' $!'*-' ! ' %(=&7 +!' $&&7 !%&7 7 ++' $ (+*' + ' J % %) ' %')% " F4' M&I C<' @7' Q>? @AFUB@' @UA4' F'' Q>ICI ?' >C<' = I ?4I A34' F'' M&U<' ' %6 +' - ' *-' *)' ,,,' KL33 ' IU7' 4@FU' CF4' 4@>4' 4@ I CV7' F'' Q@3B@7' 4@FQ' @>?4' C7<7' F'' 4F' 4@7' BC<7' 4@>4' >' 47A Q>A<' 4@FQ' = I ?47A' CF4' F' ;@34 ')' % ' 6 +' ,% ' 7' 6AF' ! A7<' 4F' 4@7 = ' @3?' ??AU I?7 ' I ''4@7 I = I ?47A' F'' 34 ' % ,') - ' + (' %) ' F' M7' <3?4AUM3<' 4F' 4@>3 = ' ?7&'' ?>' '>A' >?' 4@>3' = I ?47A' 4F' 4@>3A' @FC7?4' ?U?47C4>43FUC ' >K *,' N ' ' ' ' ' 333 ' 8?' : F<AFQ' FB 5 ' %' 4' = IB@4' B@>CB7' 4@>4' 4@7' S ICV' = IB@4' = 3?47A' F'' @3?' VA734' VUC3?' >C<' >A4>3&I 7A37' 3C' !A>CB7 6 ' ' .& $ (,=(#!(/& '+& =''& + ' ' ' * ' ' * -' ,$ * '' 3L ' %, ' >< I ' = F<7A' VA>=7AB I ' F'' ?F' '>IA7' >' I7'47' >?' @7A7' 3?' ' I FA' 34' = I ?4A74@' =7' Q7&&' 6 ! 'L3 '%+% "1 !& ' Z$' ' 6BB' %' ' (, , &++' +' &(B' $.)' !%&& !''I7&' $' 2 *+,' ' ' ! G ' 3L ' 34 ' 1 A>I ' <FC[4' = 3?47A' ?UB@' '7&&FQ?' 4F' = 7' BA37?'4@7' >< I ' % K*' N '@ * ' ' ;% % 5 ,% ' 7' QFU&<' CF4' @>L7' M77C' BFC47C4 ' Q34@' 3?47A3CV' @3?' F66FC7C4 ' >C<' ?YU3A3CV' @3= ?7&' ' % ' 3??' + ' % ' 7A' L';%) 5 ' A' >4<7 O6?@>Q' \ @7'3?'4FF7 = 3.' -C7C4' >' =>C' 4F' M7' = 3?47A7<\ F@C' >A<7 '4@7' B7&7MA>47<' 'FK.@UC47A ' % ' ' # ' ' G ' K333 ' 1 FC7' F'' IFUA' = 3?47A3CV' A76&37<' 4@7' AU' '3>C# I IFU' >&Q>I ?' = 7>C' = 3?B@37' Q@7C' IFU' BF= 7' 4@>4' % ,' ' + ' 'KKL33 ' >A&3CV' 7??I\' FC[#' 'FA' 7>L7C[? ?>87 ' 3?47A' = 7' >CI ' = FA7 ! = +!& $: 7 '%') ' 6 'P' ' ><(H" < >' &&,) ' #&'&++"! :+' F ')'% * ') ' ' % ' 'K&3L 'K +) , 4' %, ' F' @7&67 6UA7' = 7C' G' '7<7 ' G' L3?3 4' = I ?47A'U&' 3C' C7<' ' % ' ' ' ' 3' KL3 ' %) C87C<' >C<' = 3?47A' U&' 3C' <7?7?A43?F'' 3M37 ' Q>C<3A' * C+ ' ' ! '6 ' ;3) Y5 ' %* ' @7(' A76>A>43FUC ' M7 I &<3CV' >C<' L6@>&<3CV' F'' @7' &3B@4' F'' >C I ' = 3?47A'U&&' >47A' (' ' @ ' * +') ')* ' 7A' %') ' ! FA ' ?U?47C.' 4>4LFUC' F''4@7' 6U3A' 67F6&7' 3C' 7B43&' >C<' = 3?47A'U&& ' %)* ' 1 @ * ' ' , * ' 3?47A'U&&' F&8' = FC' CF4' M7' = 7C?' U&& 4 ' &&,$:7' #&'&++( ) %' %+ ' % ' '3' **' @>C7' ?' 34' = 3?47A'U&&' 4F' 4@7' 3&&' @>L7' 4@>3' 6&>B3?' L73&' 3C' 4@FB@4 3?47A3 ' FM?' 'FA=' F'' "+ ! &?# ' ' Z "+F ' \' % ' ' ' !& 8' "#' &'!7) ' ! ' (7)' (* #/' !& 8' ' #(8&! % * ' ' S ' F * ' / ' (' / ' % ' 6A' %++' ! &FQA7' <7&3B7 ' 4@>4' Q@3B@' 4@7 I ' L?7' 4F' = 3?47A = 7 ' ! &FQA7' <7' &UB7 ' % ' ' ' * $ '+' : + ' '333 ' 2 ' OMQQ' ' ' $ % ! ;% * 5' ' @7' QFFA87 ' M7' FA7' 4@3?' &>?4' 7<343FC7' F'' @>UB7A' 47A = 7<' 14@7' A7>= 7' F'' @>UB7A- ' 3?' = I ?47A = 7<' %) ' 4 ' G' $ #' / ' F / ' L ' 3 ' ' >= ' CFC7' F'' FUV@4' FUA' A>V7' = 3?47A = ?' = 7 ' % ,,' 6 % ' ' +,' @7' '>B4343FU?' =F<7?' F'' ?FB3741 ' Q@3B@' 'FA=' Q@>4' 3?' = 3?.47A = 7<' I34?' Q7&& M73CV[' % % ' 4 ' ' * ' $$$' KK333 ' % ' @7A7'>A7' UC3FC?' = 3?47A = 7<' 1VU3&41' &##'&' "+!&2 8&,' / / ' % ' "+!&2 8"#/' 6 ' 6 ' (#,' / / ' % % ' 3 ' ' % ' 6 + ! ' HM ' P 3?R' M>&<' >''7B47<' 7&FYU7CB7 ' M7447A' M7?77 = 3CV' ' >' = 3?47A = 3CV' &FQC7' 3C' >' F = 7<! ' 4@7C' >' B@F?7C' = >C' 3C' 4@7' 3C3?47A37' % ' 3 ' /) 'C ' (3' ' ' F&<3CV'4@7'? = >&&7?4' 7AAFUA' ; I7>'4@7' = 3?47A = 3CV' F'' 4@7' C7U3CB7' 7' ' ' ' '

8 , (J < ; %@

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' *'(' B*,'34'3L'3')3' F' =>87'>' =3EU4.=>? ''FA'4@7' %B ' ' ' =B ' V' ! ': (* $% ' % '33D=' 7A' =3E7C-' =>?4' @>< M77C' ?@F4' >Q>I' 3C' 4@7' M>44&7

- '< =$?F! 2 ' %+ ' %&<! 1 $(8"D&#F8(+!' (' 7(!$ 8'0:+!' (. =& !%& %&(,' $!%& 7 *& ' 8"D&#!8(+!

%))*' *'! ' F%5 ' F ' %* 0+' @'7'Q7>A?' U6FC' @7A' >&C-4F6' >C' CV&3?@' CB37C4 >C<' >' !A7CB@' U6FC' @3?' 3E7C$4F6' >' ! ': $ ' ' * ' FA<' 7&?FC'Q>?' = FA4>&&I'QFUC<7<' M I >' = U?YU74 M>&& '3A7<' AF=' 4@7' = 3E7 = 4F6F' >' 7$ <FUM4>M&7' % ' '@' $ / 'K3L' ' Q>?' 6U4' 3C4F' 4@7' UE7C$4F6

M ' % 6 B' (+' $ 5 'W * /!6*,,'0 % ,'0 * +! ' +> >' " ' ')) ! ' + ' %$ '' * @7' = 3?FC' 4F6' ?@AFU<7?' >C<' 4@73A'>&43CV?' ' '@' $ / 'K3@' >L3CV'A7BFUA?7' 4F' FC7' F''M3?' A7 = 7<37?' 4F' BUA7' >' = 3E7C.4F6-' @F!' F'' ?= F83CV' %' M > ' ' & %$%'(' %) ' * ' @7' <U437?' F'' = 3E7C4F6$ = 7C' >&F'4?A7' = UB@' 4@7' ?> = 7' >?' 4C7' F4@7A' 4F6 = 7C / @7' IFUCV7?4' >C<' ?&3V@47?4' @>C<?' 3C' 4@7' ?@36' >A7C?U>&&I' ?7&7B47<' 'FA' 3C3E7C/4F6$ = 7C

!'1D&#F! /(277(''7!' %+ ' D % 6($' 8"D&:F! /(77(:!F8(+!'!%& 8(+!(. =&!%& 8"D&#F! 8(+!' +"8"7(7)"# 5 '0*-' % %' 06 %) 0$ % [%!'0 % '0, % !'&!'

%)+' %$ 6' '),) '?L ' MFL7' 34' PA(' 4@7' = 3E7C. = >?4R' >A7' 4@7' = 3E7 = 4F6 = >?4' 4@7' = 3E7C$4F6$V>&3>C4$ = >?4' >C<' 4@7' = 3E7C. AF I >&' % * ' % ' % * (@*)& ' C& ' L33' ;7<' ,5 ,) ' @7C' ?@7' 3?' 3 = 7<3>47&I' 4F' @F3?4' @7A' 7C?3VC' >4' 4@7' = 3E7C' 4F6-V>&&>C4' = >?4.@7><

#!"?D&8F! 2 8(+!' %+ ' %&' 8(+!' #&9!' (. =& !%&7 *& ' 8"D&#F8(+!' 7+ ' % 6

' ') ! ' ' ' %$ ' '% ' &37' = 3?7C' 4F6' = >?4' %) >' %/ ' $ (' %$%'(' F %$ '3' K3L') ' 3E>C' F6 = >?4' @AFQ<?' 'F ' 3E>C' F6 = >?4' 4>I ' 3E>C' F6] = >?4' AFQ' FF4' %* ' F ' ' % ' '% +' 34@' 4@7' M&U7' '&>V' >4' 4@7' = 3E7C4F6 = >?4' M7><' F''4@7' *' %) ' % +% ' -' ' % $ % ' (' % ' %' 333' %)' @7' = >3C' 4F6?>U' %@>B7?' A77LT' U6' 4@AFUV@' 4@7' &7><3CV' M&FB8?' FC' 4@7' = >3C' A3VV3CV' 6 ! ' @7' &FQ7A' M&FB8'F''4@7' = 3E7C'4F6?>3&' @>&I>A<'3?' U?U>&&I' 3C' 4@7' = 3E7C' 4F6?

"D&#F)(' %+ ' %&')(' # *%"'% !%& 8"D&#F+("7'!%& +("7+&!' (' !%& 8"D&#F! 8(+!' 7+ ' % 6

+> >' " ' ')) ! ' % $ ' ' @7' = 3?7C' 4F6' ?>I&7' I7>A<' $?/?C' %/ ' $ (' % ' G ' F %$' 4' K3L') ' 3E>C' F6?>3&' @7?4?' ,** ,-(' :' *,' B C % ' 4' ?F' 47 = 67?4UFU?' >?' 4F' ?6&3&' 4@7' = >3C' 4F6?>3&' >C<' 4@7' 'FA7' = 3E7C.4F6(?>3&?' 3 (K' ' ' % $ % (' % ' % ' 333' K)' @7' = 3E7C' 4F6?>3&' MA>B7?' A77LT' U6' 4@AFUV@' 4@7' &7><3CV' M&FB8?' FC' 4@7' = >3C' A3VV3CV' 6 ! ' @7' &FQ7A' M&FB8'F''4@7' = 3E7C'4F6?>3&' @>&I>A<'3?' U?U>&&I' 3C' 4@7' = 3E7C' 4F6?

"D&#F)(' %+ ' %&')(' # *%"'% !%& 8"D&#F+("7'+' &9!&#,&,

%+ 9' % % ' ' ' ' ;%)5' + ' 7?FC' I7A<7? 3H' % (':=' ' ' >A?<7C' '@' ' ' % $ ': 7&>7C5' '%, ' 47 = '>' M>4<7' ? = >&I7' MF47' F''4QF' 4FUC7' >C<' >' = I((C7 I7A<7' LH-' L3H(' %),*' " ' % $ % ' (' F % $ ' 333' %*' FU' = U?4' >&&FQ' 4@7' 3?7C' >A<' >C<' 6A74?>3&7' >A<' (' 3CB@' F'' 4@3BB7C???' 4F'>' I >A<' 3C' &7CV4@' %*) & ' 6 >', '$',,+ $' QFU&<' @>CV' @3=' >4' 4@7' = 3E7C' I >A<

"D& Y +&&' (#,'

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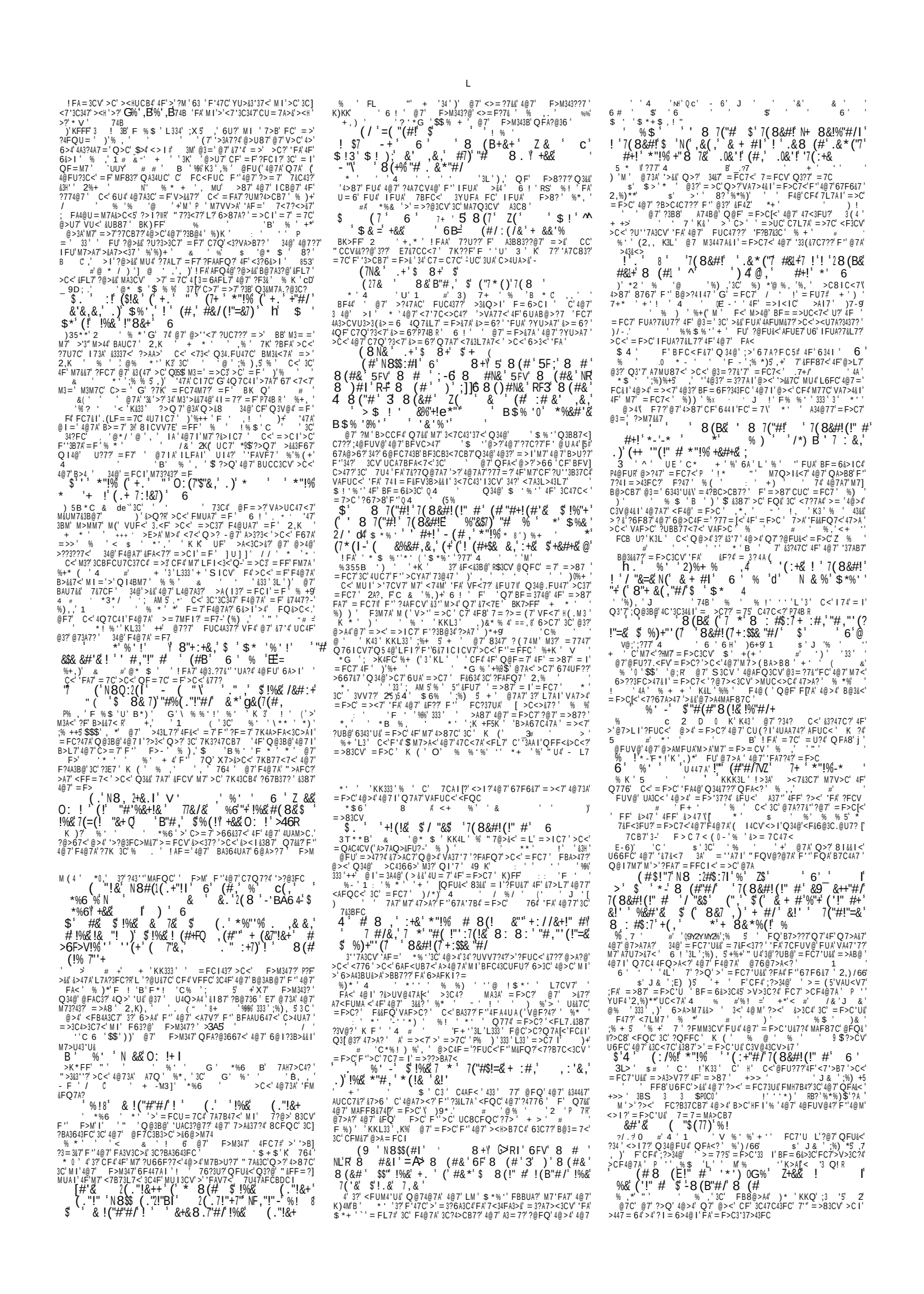
"D8(D&' 7+ '6 8)+&' 8(+&'6FV 8"+F8(+&' V 8"++&F' V-' 3' 8"+E' 3' ! % ' 8"DD]' @#"DD)E8(D&' Z ("&,' &,: 7"'(!" # $ ' 6=

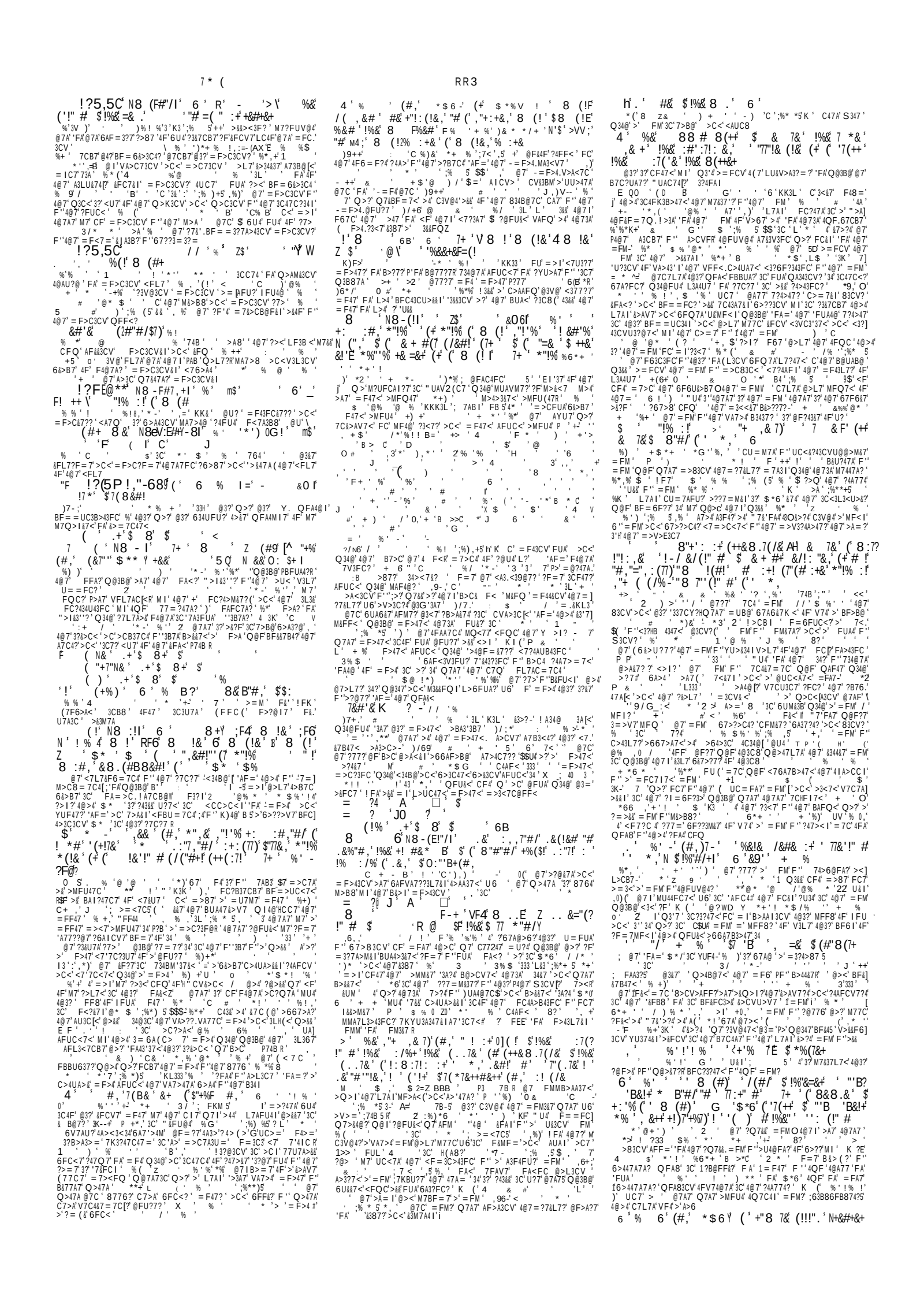
h$' '7(.) "#!%& ' 8(D&' %'&$7)': B' 6

% +*' & #' ' + % -' >' = I?7' =>?7' % *' ' 'C 5%(' $') ' >&F = FC @>4@' Q>&87<' L?' 4@AFUV@' 4@7' Q@F&7' &>M I A3C4@' G' = 3E = >E7' F'' 4@3?' &3'7' ?/ ,'C' ' ' + ' %) - ' ; AF?>A45' + AAFA?' = ?7.' = >E7' Q@7A7' &F?4' 3?' 7A3437' A' M&3C<7<' ?F' 4@>&' ?43&&' QAFCV' BFUA?7' 34' 4>87?' %'K) (' -' ' $ ';%) ,I' , + C' 4@3?' <3?4A>B43FC' >C<' = 3?=>E7' ' 4@3C8' 4@7' = 3<<&?.Q>I' 4F' M7' 4@7' M7?4' Q>I ' %'% * (' 3 - ' + ! ' * ';4Z (5' +%' @7' 7C4&7 = 7C' F''4@7' FU?7' Q7A7'3C'>' 3E.CUUD'>C<' 8C7Q' CF4' @FQ' 4F' 4>87' FC7' 476' 4FQ>A<?' 7K4A3B>43CV' 4C7 = ??&L7?' , B @),(' @ * ';7<' +' &F??'?L' %5 B' C' 4@7' 4F6' F'' >4@>A3C7.@3&&' 3CB@7874' ;4@7' U?U>$ 6&>I.6&>B7' F''4@7' (@FF45' Q>?' >' L7AI' 67A&&7K7<' >C<' Q3C<3CV' 6>4@' AUCC3CV' 3C' >' L7AI ? = >&&' ?6>B7' FL7A' (VA7>4' <7>' F' VAFUC<' B>&&7<' >' \. %5

4')+!"$?&(!" #' .&*"7,&"#' ,&7:+" #' (' +!(!& $ ' #$:+" # & 7&9"!) %"&$7)! %

)/;-' ' * $ ' * ' 3*!' L333' 5S' FA<' Q3&& BU4' F''4@>4' <3''7A7CB7' >C<' = 3?=>E7 >C<' V3U7' @3?' 4AU4@' L3B4FAI' FU7A' >&&' CB@>C47A?' % *% & ' +)' & ';7<' 5 %)' ' <>' L77' >&&' 7L' >' = 3EE.=>E7' % *' < ' ' $&4' ' @7' 6@I?3BF.4@7F4F73B>&' = 3E = >E7' Q@3B@ B&FU<7<' 4@7' 67A] B7643FC' F'' 4@F?7' Q@F' Q7A7' 'F&&FQ3CV' 3 = = 7<3>47&I' 3C' 4@7' Q>87' F'' 7Q4FC' + 4 ' ' ' '





' (#,' (I' (+' $ *60% $6 , ' 0% *) % * ' 0)%+ '
0-%') , '-G * ' ' , '0 * '$ ' '0 ! * '0 %! '
0$ ' '0* % * '/ '* ' + '0 , %' ' ,'0 * ') '
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0- % ' ' (,0+ ' ' "#+! : 8&#!(7' (+' $ *60) * '0 '
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+ ' ' % ' / % , ' +' @7' - =FM.><FA3CV' 6A7??'
%')6*-' 3 ' 3% $ '% %% ;%*+ 5)' @3?' - F4$>???=M&!'Q>?'
<A>QC' 4FV74@7A' 'FA'4@7' UA6F??'F" 7AAFA')67 ;' ' ' ' '
'5' '% ? @7?7' -=FM.>??FB3>4FA?' MAF8?' F67C' MFU??'MI'
C3V@4' +$ ' % ' F'+ ';%* +5 ,,) ' ,' <F'
CF4' 3C47C<' 4F' 7CU = 7A>47' >&&' 4@7' ?4AFCV' @F&<?' F'' 4@3?' 6A7L>3&]
3CV' (=FM.B>U??' 3V@. @UAB@R') ' ' ' ' ' %V'
$% ';% ,+5 ' FUA' 4AU7' -=FM-BA7>47<' VA7>4' =>C')9.*'
4 ' %6 ' ' @7A7' S3CV?' @>L7' M77C' MI'-=FM.7&7B43FC?'
>3? <'4F' 4@7' 4@AFC7 ' *' ' 4 : #' $ '@*/' + ' '
2' 4' 43B8&7<' 4@7' -=FM.'>CB!' =3V@43&I')9*7 0 #'
$ ' K' 333' FF' LU&V>A' >' <???A7' F" -=FM' '>LFUA')97+'
-' ' ! ' -'' ' 74' ';7<' C ' ' '4@7I'>A7' -=FM.'
VU3<7<' -=FM.'7>A3CV' 67F6&7')6..' *5 -*' % ' !
;% + 5 , ' @7' >??UA>CB7' V>L7' 4@7' j=FM' V7C4A!>' B@7B8'
)66;' & : '@)*' ' 7& 8?' , ' @3&?4' 4@7I'>A7'
47AA3'I3CV' 4@7' VA7>4' >C<' F6U&7C4' Q34@'4@7' @FAAFA?' F'' -=FM'
VFL7AC=7C4' 23K + ' ' ';% %5 '%)' 7&?FC'
Q>?' >' -=FM.3<F&' 3C<77<' G' *'' ' % ' '
C' 4@73A' >=M343FC' 4F' M7' -=FF.&7><7A?' 4@7I' Q7A?$' 3C' '>B4'
-=FM.&7<' > ' ' ' ' *' % *'=' + ' @>4'-=FM.'
&387' 7<UB>43FC' F'' 4@7' ?4A774?' +*' 4 %6'C '
;%* 5 %% +%' C' >&4' -=FM.=7743C?' 4@7' 7C47A4>3C=7C4' 3C'
V7C7A>&' 3?' >MF=3C>M&7')9*+' 1 '@ ' & ';% 5'
' @7' b-=FM/FA>4FA' F'' &>A7' >C<' S7AAI')6.-' ' 8 '
$ ' % % ';% + 5' K.' @7' -=FM' 67A343FC' 'AF=' "UBB?'
Q>?' 6A7?7C47<' 4F' 4@7' 83CV')9/+4 0 ' ' $ ' 7A' 33
L33' %, ' @7' Q3&83CV' ?63A34' ?74?'U?' 'A77 'A77' 'AF='4@7' -=FM'
AU&7' F'' >???FC?' >C<' 66743A7?')'+ ' & '
,*&'' ' % ')% ' ;% 5 ' 6AF67C?34I' 3C' 4@7
4FQC?.'F38' 4F >< =3C3?47A' 4U=U&4UFU?' HU?43B7' 3C' 4@73A' FQC'
-=FM-Q>I

>' &'"(7' 8 .' : !+%" ' ' : !+%" '
(8 #/ !%&& 7 *& ' '7(++&+' 8 .' ,&$&#'&' ,&$&#'&'
.)' !%& :7('& (+' +&,' ! $ 8"7"!( ) ,&$&#'&'
!8 .F, "=& ' #& *% '"#"'!&+' (8 . ' 8 .'$&(+!'
'*') .0G ! ,' (' ..(#O:&!' &# ! &=&,) #&,' 8 .'
7(*' (*E "8 +&, (#,' &#% '&,' .)' (8 .'
8 .F8(+!& ' #& *% ' ' #! 7+' (' 8 . ' 8 .'
"#" #' !%& "#" # $!%& "7"!& (!& ' :#' :7?
!: &, ' 8 . ' &(,& ' (' &(,& ' .&7 #/"#/ ! ,' !%&
8 . ' $8 .' +!) ' (' +!) '" ' :7(!"#/ (8 #/ !%&
8 .

' 2 # ' * ' % '3) ' :Re' @7A7' >A7' CF' QFA<?' ?4AFCV'
7CFUV@'&' 7K6A7??' 4@7' V7C7A>&' <>CV7A'>C<' <7VA><>43FC' F''
4@7' =>CC7A?' F''-=FM.BFUA4?@36 >?' <3?43CB4' 'AF=' 4@7??
' ' 4 ?& ' ' ' ' ' * ! ' ') ' 2 ' F' B34I'
' >''FA<7<' 4@7' ?>=7' ><L>C4>V7?' 'FA' Q@>4' =3(@4' M7' 47A=7<'
>' -=FM.<'7'7CB7' % 8, B' 3 ' 3% $ ' 3' 333 ' B * <' 4F' 4@73A'
F&FC7&' 3&<=>I'>C' F&<' U=67A'>C<' &>47' - FM.<A3L7A'3C'
??7K' 6 ! '9%6' L ' + ' ' 3<7&3CV. A347A' ?@>&&' BAI ' \'
4@7' >63?4?'>A7' ??4' U6 # HU?4'>?@3?' FM. A&L7A' <3<' 4F' 4@73A'
>MM&7' % ' 4 ' $ ' ;% +5 ' % ' @3?'3?' 4@7' 4@3A<'
<3CC7A 'FC7'F''4@7'F4@7A?' M73CV'>' -=FM' '7>?4' >4' ?3K' ?@3&83CV?'
>.@7><' % ' ' * '@% + 'MBe ?' @>?'M77C' ?77C' 3C' 4@7'
B>??'F'' >3C4' 476@7C ' >'?FA4'F'' -=FM.&>Q' =3V@4' M7'?4>47<'
>?' 'FA=3CV'6>A4'>C<' 6>AB?&' F' 4@7' &>Q'F'' F??7' ?>6*-3 '
3% $ ' 3C ' L33 ' ;%*+ 5 *% - FM1 >?47A? 4@>4' U6FC' 4@7'
>4B@.QFA<' >A7' 4F' MA3CV' 'FAQ>A<' ?F=7' @>A7.MA>3C7<' FU4'
Q@3B@' 4@7I' B>&&' 4@7' 7F6&7' %*) ' 1 & '3C' @*/ (' /
*6 % $ % ' * ' @3?' 4@FUV@'>' = 7A7' -=FM.F63C3FC' 3?' 4@7'
F63C3FC' 3C' '>?@3FC' >C<' B@7A3?@7<' MI' 4@7' FM' F'' >&&' <7]
CF=3C>43FC?') *' # '! ' !'' 7<' ;?5 'M' UB@' 4@3CV?'
>?' >A7' FUA' 667A. >&&7AI' U<37CB7' 3C' >' &>I. FU?7 '
@7?7'>A7' - FMM. 7>7<7A?' %*K)' 4 ' ' * ! ' F' '
!' %,' F' IFU M7&37L7' 4@7' -=FM-?4FAI' 4@>4' S3CV' 7FAV7'
<7?3VC?' 4F' =>87' >'MA3<V7' 'MF>4?'AF=' >CCFL7A'4F' >6.'
63CVZ

44FM'N8 .I' T6B' 6 '&9' ' P ' ' LB
"' (#,' " I
T'% ' % ' ' ?4AU=674' 6
>>' ' + ' ' * + '3' L33 ;7C<5' 7' 83?4' >C<'
6>A47<#' ?3V@K '?@7' <3<' ?FM#?@7' 'FA'@7A'&U?4I' (<' $ 'FA'
=I' FM' %)*' O' % ' ' ')%!'%,' >' 7CB@'FA' @FA7
6 !'%,' @7C'>' FM' @7'@>?'M34'C3?' F47' @7'Q3&&'47&&') *
' @ ' @ ') '] ' ' AF ' @7' &344&7' FM'4@7' 34I'
>?4BF>47?A

MM4' #/&/7"/& (!!" &' (' ,"+%(."7&' (7+' % 6'
$*60! ' 6
%)) ' ' + ' ' * + '3' K' @73A' FM?' B>A'?'
>C<' FF<?'>&&' A7C4' %*' C ' /* *' ' F'*%' 0,' 4'
?@3C7?' ?' "7>U4I'<F7?'4@F[3C'>f FM. A7??' *%'!* '
: ' *' %' %' 7B ' @7'&><37?' Q7A7'>&&' 3C' =FM?';@FQ'
<F' IFU' B>&&' 34Z5' UC<A7?' -*K,'! ' / ! ' F' ' '33'
A>663CV' FQC?'>C<'<3A4I' 3CC7C'Q34@'>&&'4@>4' @U<<&7<'
7BFCF=I'F'' A7??'Q@3B@'6>???7' UC<7A'4@7'V7C7A>&' >=7'
F''>' $*6' 4F' >&=F?4' 4@7' 7C<' F'' 4@7' A73VC' F'' 7FAV7' 4@7'
??BFC<')6+*' ' 6 ! ' C' 4@7' BFUC437?' F'' ???K'>C<'
3<<&???K'4@3?' =FAC3CV'B>6'@>?' >I@>I?' M77C' B>&&7<>' $*6'
>C<'CF4'>' $*6' I'?67&&3CV' F'' 4@7' QFA<' 4@7A7'FA7' >VA77?'
Q34@'34?' =F?4' '>=3&3>A' 6AFCUCB3>43FC' % /* ' ' %
' ,,% F=7' &><37?' 4>&83CV' F'' 4@7' A7L3L7<' '>?@3FC>M&7'
@7><<4A???O=FM?')97:' 4 ' '*-' 'KK3' ' C7>4'
&344&7' F&<' QF=>C' Q7>A3CV'>' B&F??' =FM'>C<' 63CC7A?
' ' F M' ;&U((M5' ; 77' YUF4 5
% ' ! ' % ' % ' @7' =FM' 3?' >' ?FA4' F'' MAU?@' BFC]
?3?43CV' F''4@A7><?' F'' QFF&' FA' ?3&8' Q@3B@' >A7' V&U7<' FC' 4F' >'
4@3C' @>C<&7' F''QFF<' FA' Q3A7
4 F M ' 6 ' P ' ' "' ' "' 6 B
" ' & H

$' %' ' ' 8 :$$7& !%&& %&(,' $N(' & + #I' ! '
,&+#' :#!",7)' 7+ ' *' $*6'+/
%))+' 4 ' - ' * - ' A7' ' M' ,' 7C' '@>L3CV'
@3C?' >?' ?=FF4@' >?' F=7C?' >C<' 4@73A' !>B7?' =FM<' 3C'
FF<?' 9649' 3/* ' % ' 3' F47?' , ' FC8?' >C<' !A37A?'
=FM[<'3C' 4@73A' FF&?' >C<' &FCV' F>4?') 6. ;' < #') * + ,
%0 %6 ' 7#'3C' 4@7' V>&&[A!=FM[<'?@7' ?34?'?7BUA7' %' *+'
!* ' * ' ,' '8+ !' %!,';%*+)5 9$ VF' >&Q>I?'=FM47<'
>C<'3C'>C' C<4?7?' %*)' <' ' '+&' 8?' ; &FM75' ,' ?R' ?@>&&?34' =FMM7<' U6' 3C' <FUM&7' C3V@4.B>6?
4' *' $*6 2 (4' *' *' %0$*66' P' !' / ' "# ,"+?
/:'+&' '(!!" &,' + ' (+' ! ' &+' (&' /#"!" #' ! ' !%&&
:#$(+%" #(.7& (! $ (!%&(! &' &!' &#'&NL(++ ?
'"(!&,' *"!%" " 6B4' !' $ &O:&#!7 *' ' 8 (#)
P *, W ?77' R' %*,*' ' 8 ' ' / /% '3L' + ' ' <FC[4'
QFC<7A?UB@' >?' 4@7??' VF' >' =FMM3CV' >=FCV' 4@=F?7' =7>C7?4'
F'' =>' @3CV?' B>&&[<' !A77. >?FC?#AFUV@' @7>4?'>C<' BFC]
'???[<' 7&U?3FC?' >A7' 4@7' '344??4' 4@3CV?' 4F' >=U??' 4@7=(' **
* ' '(' *+' ,B' % ' 0,' 4'4@7' 6&>I'FC7'C3V@4' Q34@'4@7'
!A77=>C-\' =FMM3CV' 34' 3C' 4@7' V>&&7AI' %*,' 3??' & #'
) % 3L' L33 ' >A>C4' [&& =FM' Q34@' 4@7' M7?4' F'' 4@7=.\'
% , ' 4 $ ' % ! ' * -' % ' * ' 3K' 9$ <FC[4'
Q>C4' IFU' 4F' =>87' IFUA'>667>A>CB7' % Q>C<4F'VF'3CBFVC34F'
4F' =FM' 34' IFU' 8CFQ' 4F' VF' 3C' =>?YU?A><7' >C<' ?34' 3C' 4@7'
V>&&7AI' % *' B*' *' ,' % ' ') ' 7'B>CCF4' =FM'34'
4F' ??7' >'6&>I'3C'4@7' 634
.' N8"1.I' ' Z$' "' $ "\
$' %' ' :(!!('B' # (8 . ' ',"+ ,& 7)' * ,'R
!' * ' :#,' (#,' 8 7&+!' ,'(##) ' ! ' &+!'
:# , :7)' : #' ! %! #/' (7+ ' ' /% ' ! ' .&
(!!('B&,' '+: :#,&,' .)' +: '% (8 .
)6;+'0& C -' ';% *5 '+ +' >?4'Q778'>'BFAC'
'>B4FA' @>' 87'4F' @>L7'M77C' =FMM<' '$ 8 ' $ '
>C<' FQ'?@>&& ?7AU7''FA' F3?7 '>C<' =FMM3'I'FU4'>4' &7B]
43FC?'BFC'FA=>M&7' FI>&' 7C4&7=7C
4' F M&&33U A'' 6HX' 6 ' '' ' 0'.3K>'% R
%& ('!" # +,6 *' '"#O:!' % 6
%>?.' ' ! * ' % !,' -' % ' * ' 3K' ' @7'
=FMM3CV.6>A4I' 'FA' 4@7' 4@7>4A7' Q>?' <747A=3C7<' 446FC' >C<'
B>AA37<'3C4F' 7''7B4.
. "#C$' N8 1."OI' 6 ' 6^$ Z$' "' F
.33' '$\' %& ('!" # $!%&=& .' $!
$' (!%& "#/" "# ' * ,+' !%& ('!" # $('8 .'"#
(++("7"#/(' & + #
%')6*-' 3 ' 3% $ ' 'L33 ';%*+ 5 ' @7' 63A3&' F''4@7'
>B43FC' Q>?' CF&' MAF87C'43&& '4@7' I7 FC?63A>BI' Q>?' <3?]
BFL7A7<#' >C<' 4@7C' FMM3CV?' Q7A7' &>3<' >?3<7' >&&' >4' FCB7'
*' ' 1 ' ' % ' FL ' 4' 3?' <=3A>&' 7ACFC[?
M3A4@<>I ' >C<' 4@7' C3V@4' Q3&&' M7' 'U&&' F'' =FMM3CV ' MFC' 3A7?'
>C<' &3V@4?' 9494' $% & ' ' % ' ' , ' C7L7A' @7>A<'
>C<' IFC7 ?>I'4@>4' 4@7' =FMM3CV' F''>' FC<FC' AFU4' Q>?' >CI'
4@3CV' MU4' 3C?3&3<' K ?' % ') 3% $ '% ' >A' +0*' QF'
F''4@7' 6A3?FC7A?' 6&7><7<' VU3&4I'4F'B@>3V7?'F'' =FMM3CV'>C<'
A3F43CV
% 6' 8\' ' ' 6W ' * ' '))+' +%% >L3<'
FF?47A'4@7'A7M7&' 7C7A>&' '7C7<3B4' ACF&<[?'F&<' >BYU>3C]
4>CB7'>C<' =FMM3CV'BFC'7<7A>47
4' +' '
' ' ' :% ' +' ' 'B 2C 2 ' @7C' ' '
'& ' 6' ' ' ' & ' ' ' $' ' ' '
' ' ') ' W ' 'B>C' ' +' '
6' ' & ' ' ' ' $' $' '

' Z' MU?3L7'4A7>4=7C4'+' 7,"#/'N+&& ' K8'
K ;(' * '' E ' >A' ' '@7'M>?'CF4'7CFUV@'4F'V3L7'?F=7]
4@3CV' 4F' 4@7' Q>347A'>C<' 4@7' F?4&7A' '37' =U?4 'UC<7AVF' >'
VFF<' ;FA'A>4@7A'>'M><5'=FMM33(' 'AF='4@7??'V7C4AI
. "#'I'N8 F."/I HHH'%' Z$ ' B'T' '4\'
%(!'/(!%& +'"# (' 8 .
% +,' ! ' ' *) % ' * ' 3&&' 4@7' =FMM3CV' 6F6U&>B7'
?@>&&'B>4B@'>'?6>A8&7'F''4@73A'A><3>CB7
4 $] .7+7' N8 E."0I'%' 7+ ' 4 9# ."+%' Z$'
"' 6B' H' F Q' &+&8 .7"#/' '%(('!& "+!"" $'
(' 8 . $'/"=&#' !' 8 .."#/' 2*6 4B' ,"+ ,& 7)'
!:8 :7!: :+' 7+ '$'%((' !& "+!"" $' ' (&(7"#/
!'<!%&& 8 .'E '7 *&' '7(++&+' =:7/(' '7(F! (
' ' J '@% '6'! * !'6,' % '*-'@ ') '*-'
% '+' @7I' 4UAC' =FA7' FMM3?@' 4@>C' >' FL7A' FUA4'
K (' ' M' !' -' $ $ * ' % ' ' @7' UAL7IFA'
V3L7?' 4@7' 7K4'>' =FMM3?@' UAC'>C<' !F3?4?' 3C' ?F=7' F'' @3?'
FQC'3&&' >CVU>V7' +$+' : '& $ ' % ' & '@
;% +*5 $ %) ' 3?' =FMM3?@' '>&&>B3FU?' Q>'I'F'' >AVU3CV' %*,'
! ' % ' 2 ?% '3C' @* % '!' @%/ & ' ; 74'
F=5 %) ' $ C7L7A' Q>?' 3C' ?F' =FMM3?@' >' 6&>B7' Q7' BFU&<'
?B>AB7' Q>&8'4@7' ?4A774?' 'FA'4@7' CU=M7A?' F''67F6&7'4@>&' 'FB87<'
>MFU4' U?' ' ' P & ' 3% $ / '*-' %') ;7<' 5 '
?' 3'' 34' Q>?' 6F??3MA7' >'47A' AFU?3CV'MI'3C'&>=>=>4FAI'6UM&3]
B>43FC?'4@7' =FMM3?@' (3A34' 4@>4' IFU' BFU&<' <A>Q' 4@7' &3C7'
F'' =F<7A>43FC' +*' '@ % 333 ' @7' VAFU6 Q7A7'
3CV' FA<3C>AI' FQ&>C<' A7???' ?' Q@3B@' BFC4A>?47<' Q34@' 4@7'
>A=?' 4@7I'MFA7' V>L7' 4@7=' >C' 3AA7VU&>A' >C<' =FMM3?@' >6]
67>A>CB7' ' C % ! ' % ' % ' %,' @7' = FMM3('
&FL7' F''<7?4AUB43FC')99-' # ' !& ' F ' KL3 ' L33 '
' '7' HU<3B3>&' >A34@=743B>&' 36' 6>???CV'?7C47CB7' FC' 34')'
F4&>3A7[?' '&>U<R#' CF4' ?@A&78&' =FMM3?@' >C<' '&I3CV' F''' 3C4F'
4@7' C'3C347\
&#'&$ 2 ..'+ 7)' %!
%*K)' ' ' ' ' C ' ' ' @7' 4U=U&4UFU?'
343E7C?' F'' M7??>&FC3B>' '@>L3CV' =FMM&?@&I'=UA<7A<' FC7'
F''4@7' =67AFA[?' 37U47C>C4?' ' ' ' ')',+' U&I'
,)' F=7'=FM3?@&I'<3?6F??<' 67A?FC?
7.'+8' N- LF.'D18I' Z$' " h' F \'
..'+%. &%(=" ="
'C +&G ' %O0' ' '), ' F4@3CV' M7447A'4@>C' '
Q@>4'Q7'=U?4'B>&&' =7A7'=FMM3?=
!JJ,7$' !JJ8 ' +&& ! ' ' '
.F' (' Z\'$' 6B' %& &7(!" #!' ('
$*/$+ '2$+ '^>' (' '+' # !' '7&(' # "#,
'(' * # ,)' * 8&## '# !%&& "4!% (#,'&(7)' >3!% ' '
N+&& O: !+ I' $' 6 B' 5

)

h' . ' #! 7 ' :7& ' / =& #(#'&' 7+ ' (' +)+!& 8 ' 8 &!% ,' $' / =& # 8 &#! ' 6 W " (6'@ ' '@ 'N ' , &' '>R5>!' 43 %(#' % 7)' N + #&#' +&&!%' !%&8' +&7$&! ' $)!&' / &(!7)' (#,' &#' &(+&'#' +E & "!&'#' 8 (#&' .)' (' 8 , & -) #' $' !%& %&:&#7)',"+ &#+(F ') #+' 9 5!' ! # " ' > ' . ,)' 7)) # / ' 8 (' !&' 8 (, &' $' + #,)' &+!(!&#' (#,' ,&/ &&+' $' 8 &#' * . "' %&' "+ ' / :& 8 &, ' .)' !%&' :7&' (#,' 8 , & (!" #' $ &(+ #') 7 ! 9 7 < %O ' & * ' %%' VA6' ' + : &7)' %&' Z0 ' ' : 8 $ &)' : B&' $ 7 : '&+!& \ ' . &) #/' (' 7) : &' (#,' %(: "#/' !%&' 8 , & (!" #' (#,' / :& #(: #' &' $' !%&' ' 8 8 # * &!!%' B"#/' &#)' , ' ,' #&: &,' * (: & ,' "# + ' 8 (#)' %(+(,&+' .7+*' ' F * ' ' -+' "9 ' "" D' !' 8 # !' . &' , : .!&,' . : !' !%&' 8 , & (!" #' $' !%&' B&"&+' (#,' "8 +"!" #' $' . (#,+' * & &' (!' $" +!' +&!7&,' "#' !%&' !" &+' &(=&#'+%(7' &=' &' %!!&,' ! '&#!0) &' !%&' &#!&' < %V ' *' ' 'V5>' $"'! 8 "/%!' 7&(+&' !%&' B"#/' $' #/7(",,&' ! ' ("#!' & !()#&' $' !%&') 8 &#' ! ' ("#!' & !' #&7)' * "% ' +% :7,' &#!&,' . :!' (7+ !%&' #: 8 . &' $' !%&8 '%&' !% : /%!' !%(!' !%"+! 8 ,& (!" #' +% :7,' . &'7- !%' +: &!"&' (#,' 7&(+: &' !' . !%' !%&' (!"&+ ,' . (!&8 &#!' $' +&=& "!)' ' "/ : ' &+! "'!" #' * "!%"#' 8 ,& (!&'7" 8 "!+' % ' 7+ '$ &, : 'E' !" #' N $' &9 &#,"!: &! ' (. (!& 8 &#!' ' 7 * & "#/' N $' &' : #"( )' '%(/&+! >R34' < $ #' %) + !' ' ' """" '=' N>6@@!' V>' %&)' ,&? . (!&,' !%&' 8 (!!&' ' #' & #"#/' !" #' &8 ,& (!" #' $' !%&' 8 ,& (!" #' $' !%&' 7(*' @%/ %'B / !% %' E6 "' '< $ 'C / '*-' ' 'R>R'Z &\' * &#!' (. :!' .)" ' : +&' $' 7(*' ! ' +! - ' #"8' (#,' $ '&' %"8' ! ' (' 8 ,& (!" #' $' &9 &#' &' 9$"(9' ! ' 6% ' * ' * ! ' N (8 ,&#!' 9" ' =&, ' * %&!%& ' (' /&#& (77' 0 : . &7&&' +%(7 . &' $ ' !%&' , & ! - ' * %&!%& ' (' 8 , & (' " #L' >453' 4 @) + '"=-'"' #' &9! &(8&#' $' !%"+' " #, "!" #' ' (#' "!' . &' "# 8 (#' '=+&' (' 8 ,& (!" #L' >635' # ' ' ' + $ * ' - ' @A@ %$"#, ' . :!' ! * ' !%"#/+' !%(!' 8 ()' &#,&' !' =8)' "$&\' %( )' !%&' ,& (!" #' $' (' (#-+' &+" &+' (#,'!%&' / ,' :+&' $ %"+' ! :#&' >VA3' #" ' ' ' -' %' 9 7=" ?' ;VR' !' * :7,' .&' * "!%+ 8 &' ,& (!" #' #7)' $ ' !(#/& +' %'>V96' & ' $' N>V@Vl' '"' 5>' %(!"+' (77' ' !:&' . :!' (' ,& (!" #' $' 9' &+ +&#+&+' # *' #7)' * "!%' &$& &#'&' ! ' ' #, . :' ! "#" #+ ' ,& 8 (#,+' ,&+" &+' ' !%&" ' "#, : 7/&#'&' (= ",(#'&' $' &9! & 8 &+' +&7$F' #! 7' !&8 & (#'&' ' '(+" #(77)' $' (= ",(#'&' $' +&=& "!)' ' "/ : ' 7&#"!) ' '7& 8 &#') ;55F A! ' ! ''N 77+!' 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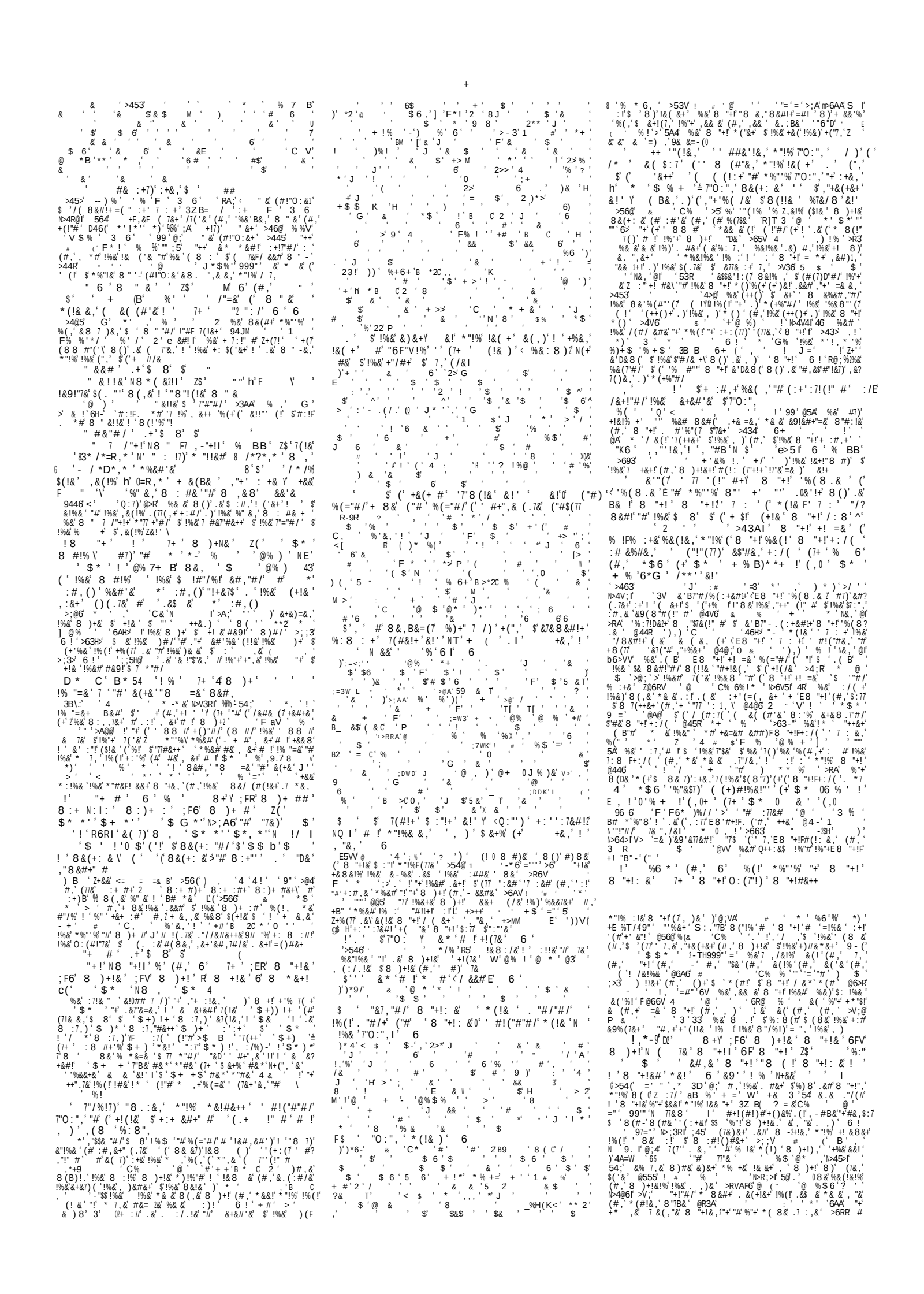

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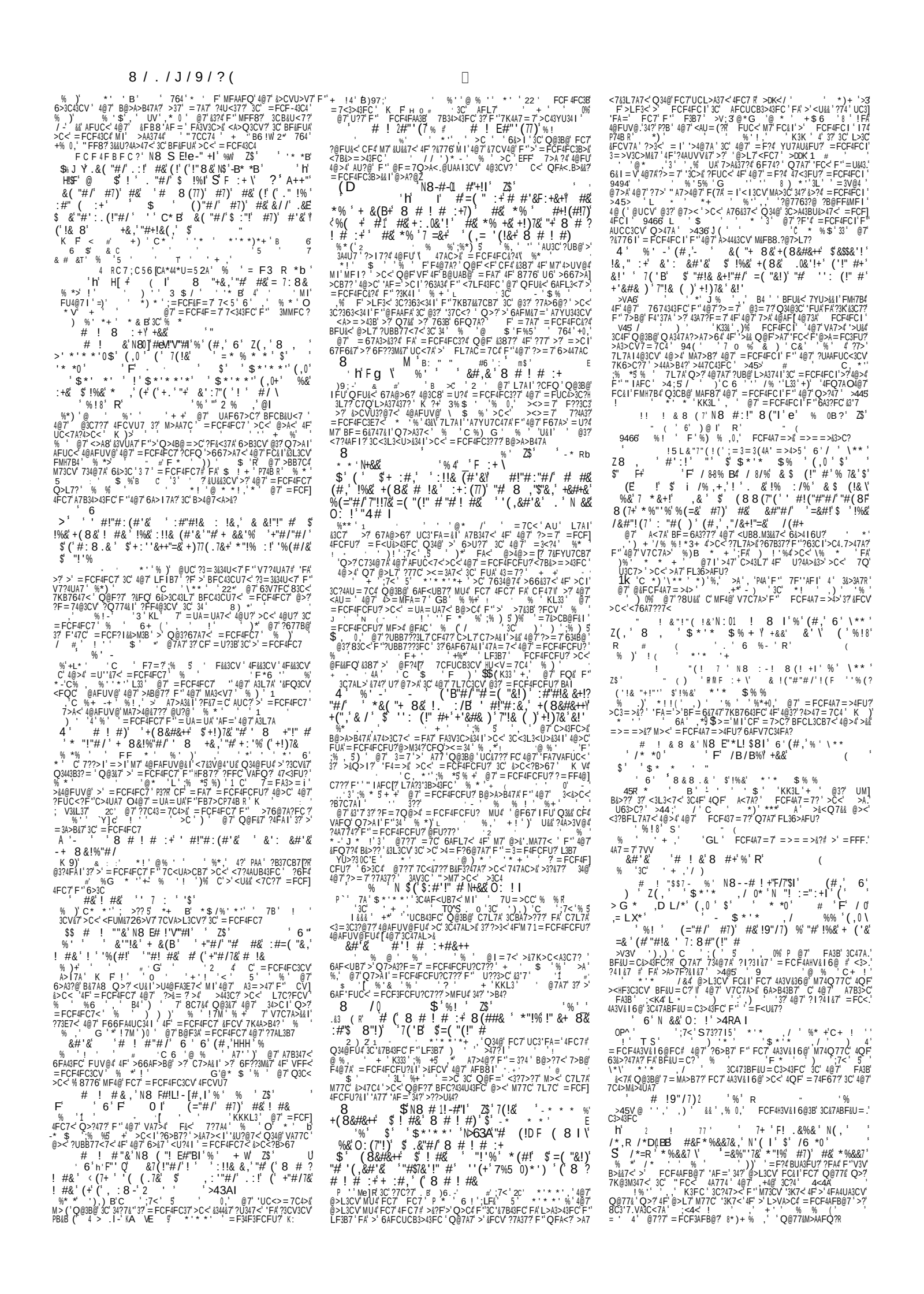

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Q3&<&I'Q34@' >' Q7>6FC' "FAC@F&=' ' %' 4F' ?4>C<'
7K>B43CV'.?F=74@3CV'VFF<' ' Q' *B%' 4F' M7'FF&
4F'M7' =F&' C7>3[&I'BFC7B47<'Q @'
$' ' ' <' ' .&"#@ (' +!(!& $:#' #+'" :+#&++' ! '
8 =& (#,' (' !' *"!% :!' !%& "8 :7+& (#,' / :", (#'& $
!% :/%!E'N '%8", !I' ! '&9' ! % 'N+&& ' 'g] I
K9) ' P777 4 " ' % "') ++' ' ' D
L33' %+' @>4 >' QA74B@7<' >C<' 677U3?@' '7&&FQ' 3?' 4@3?' S3CV
F" CV&>C<'4F' =F67' Q34@' @3?' '>4.MA>3C ' 'F&&FQ7A?' ?F' >A47
FU4' F" @3?' 8CFQ&7<V7' E)F>' O' %$ ' C3' 3L' %;%) +' ^F 5
@>4 <7U3&& Q>?4 @>4' 4@U?' @>4@' BF?UC<' IFU' >4' @F<=>C'
M&3C<# I7?' Q34@FU4' '77&3CV'Q34@FU4' ?3V@4 'j A'MU4'
>'?3B&I'6>A4' F"FC7' 4AU7' ?7CB7' FU&<'CF4' ?F' =F67' E)3F' O'
$ /' + ' U7C' 3C'<A7>=7 'Q7A7'Q7'<3U3<7<' 'AF=' 4@7=' '
C<' Q7A7' MAFUV@4' =F>63CV' @34@7A
4' ')"&?' #&+&7$: ' ! ' &##:" ' ! ' &8(?"# "(
7"+!7&++' ((!%&!"' ' #,"!" #' *"!% :!' 8(B"#/ (#)
&$$ f' ! ' :+& #&+&7$' ! ' .& , :77' ,&0&'!&,' (#,'
+ " "!7&++

,)'% ' / *' ' '3L' 8?': AF?>A45' ' ' C<
>?' 'FA' >A? ' 7' =F63CV' ?34?' M7@3C<' 4@7' 834B@7C-<FFA'
%)*)' ! ' %"' *<' *! 'L' 33' 3443CV' =F63CV' &3&7'
@A77' FA' !FUA' 7&>CB@F&I" "3A<?' 3C' >' ?6>B3FU?' LF&&>A!'
6;+' % F' ! ' 7A7' % ?3?' =F63CV' >&& 4@7'
&3L7<FCV' 3V@4' 7LFUA<' Q34@' 6&77C' >C<' 4A>CV7A' 4F'
7&3V@4')66;' 8 % $ *5X' 8?' %* ' * '
!FA'4@3?' 'FA4C3V@4'@7' @>?' VFC7' >MFU4' ?3V@3CV'>C<' =U?3CV'
>C<' =F63CV' K)?' " 'C *'' L' 7[?'FU4'?F=7-'
Q@7A7'4@3=B3CV F''Q@>4' 3?' VF3CV' FC' 3C?47>C' F'=F63CV' 3C'
4@7' @FU?7' % ' 3??' ' % 333' %' @7
Q>?'?43&&'=F63CV'>C<'A7?7443CV'4@7'<3?B>A<7<'&FL7A'
- ' ' F ' ; ' 3C<>A5' @ ' !% %'%' 8?' %' %,'
%)+' 77' IFC<7A'B&FU<'4@>4' =F67?Q34@' =FUAC'U&'?@><7'
M ' 7+' 0 %' ' Q 34@'%G%,

)6+)' ' ' ' ' ' ' %== M & 7&7?43C>'@>?'4FF'
=UB@'?63A34'>C<'4FF' =UB@' ?7C?7' 4F' =F67' >Q>I'@7A' IFU4@'
>C<' M7>U4I' % ,B' ' ') ';%* 5 K33' * ' 3?'
A7&3V3FC'<3A7B47'@3=' CF4' 4F' ?@U4' @3=?7&=' U6' 3C' >'B&F3?47A'
>&FC7'4@7A7'4F' =F67'>C<' =F>C'>Q>I'@3?'&3'7
' %' ' 8(B&',:77',&0&'!&,' ' 8&7(#'% 7)'
*' #7)' 8'(#,' "#/% B!' .& !%&=" '!"8' $
&##:"

' 1 ' 6' ' K33' KK3';%)%,5 ,* F4' =FF6[4'
>4'@F=7'MU4' =>663CV' C<?' %),%' & ' % ' 3'
3U' 3L';%),+5 % (>CI' =7C' >A7'LC<FC7' MI'4@3?' =7>C7?'
=F67<'>C<'?F' B'7H7B47<' 4@>4' P74B R' K) $$+' ' '
-'='3L';7<' 5, ' 4'3?'<FUM4&??>VA7(' 3?VA>B7' 4F'FUA'
S7&3V3FC' 4F' 3=>V3C7' 4@>4' 34' 3?' >C' C7=I' 4F' 3A4@' >C<'
@7>A'U&C7? H' 4@>4' =7C' >A7'C7L7A'?7A3FU?'7CFUV@' 43&&' 4@7I'
>A7' =F67[<' 3C4F' 4>4U7?' * ' @' ' ' - ' O -'=
;7<' 5 %+ ' "FI?F" =3&<' 7=67A?' =U?4' M7' <3?63A347<'>C<'
=F>67<' MI'34')6+4' 4 'C' 1 % *-' $ ' ' +'
@7' L3?BFUC47?? UAV7<' @7A' CF4' 4F' =F67' @7A??&"'>4' @F=7'
?9 *'C ' % ! +'KKKL3' I'&>4@7A'3?' =F(<'4F'
<7>4@' 'FA'Q>C4'F"IFU'MF4@' K K0 #' A- ' (' >
FA<FC'BFU&<'CF4'BF=67&@7A'4F'A7=3C'>4'@F=7'>C<'-=F67'
@7A??&" 4F' <7>4@[?>?' ?@7' 7K6A???<' 34' ' * $ ' % '
6A'+ +' CI'FC7'B>C'?77'IFU'>A7' =F67<'4F'<7>4@

!07@'N8eL# !I'HHH' %' Z$' ' ' I' F ' "\'
H'(' !: &$'&,'.&*"7,&&,'2*6 4' .' $$&'!&,' *"!%
&##:"' ,&0&'!&,' 8&7(#'% 7)'7 *F+ " "!&,
E=F' 'F'F**)%/' '3'3'3C' "U 7C' '@' ' ' U4'
I7' =F67<7' =FCB837?'B>C' I77' CF4' 8CFQ7' >' =>C' 'AF=' >'
>A3C>?744' 3C' 4@73?' !37CB@3'37<'.<>I77' F" FUA?Z' %R5'
8 ' +$ + ' %' ' 3L' L3' 7' 3?' M7Q34B@[<' FA'
=FF6[<' FA' @3?' MA>&C7?' =7&47<' K)('0 ' ' ' %
7L7A34I 'F'47C 'MA7>83CV'4@7' 3C<#>C<4D7C'3C'4@7' &>B7'
F'>'<3?FA<7A&I'IFUCV'!7&&FQ'IFU'@>U7'>&FQ.?63A347<=F>6[<'
A7>4UA7' + ' $ % 5, Z' ' 8?' $$$$'3'
%+' 7A' =>?47A'C7L7A'A7>C'3C'4@7=' MU4'@7'Q>?'734@7A'VU47'
=F67<'FA'3C'A>L3CV'?43?' K))' '<' ' 'B' %' '
K&L333' [L7'VF4'YU347' =F67<'>C<'<3?=>&' ' ' #'
V')' %3'3' 'Q>?' =F67<'@3667<'Q34@' >&& 4@>4' <A7>AI'
@F?634>&' QFA8

-' !207@,,7** $' 6' D' J %! !"' ' ,'
. R' %&' #,"!" # $M73CV' 8 &,
>>' ' 4 ' ' 'F*!'L33'K',% C&7??' B7643B3?='M7'
@73V@4C7<' UC4F' >' <3?7>??' >?' 67A'7B4' >?' 734@7A' ><C???' FA'
<FQC.A3V@4' F3$7<C???' K))' '<$ ' % '33' KK& ':%(K 5
%)%' 3L7C'FL7A'734@7A'4F' =3??A>M&7' F67<C???'FA' 3?4A>B43FC'
E &F=)&[' %)BB' Z ('B' $ 8(!" # $ 8'
#&9!\') "(' '"# ,!' *)' 3

!07 787@'N8R* ("F,I'% 7+'V 8 N IF
&)&,' Z$'+!&8' $' ' ' N*%& &' +&&' +&#+&' "I \'
: .7"#,'+% !F+"/%!&,
F@C?FC'%* '7AAFC7FU?&!'7K6&>3C?'3&'?' ^M&3C<'3C'FC7'7I7-'
'F&&FQ3CV' 3C?QFA4@'Q@F'A7C<7A?'34'MI' +)+
%)) # $ ' ,/A" @ '*+'&'*G'!*'$ B> C ' $
4@3C8?4@FU' >A4' =F6.73<7 4@3?' =FAC3CV'V3U7' +@7' MFF87'
)/;6 1 / 'F %' >%' =F67.73[<'FF&7'@7'A3?3CV'
'3A?F Q>?'<77=[<' E) ' ' B V/+'' $ ' ' /
F6.7I<' >=' >?' ?F=7' @>L7'?>3<' "7B>U?7' [L7'&3L[<'?F'
&FCV' >' =>3<('%*A')' $ ' ' ' ' ' ' ' /
>L3CV'<AF663CV'FA'Q>47A3?M'7I7?#'=F67I7<' %*) ' # '
&V' '/I ' ' */ !';<3=' ?3V@47<5' <+'%' %'+'
)*+ ' $ %)% $/' C% '$ %*+' 7' 3?' CF4'VFF<.&FF83CV#
@7' 3?' =F67.7I7<'>C<'UCV>3C&I

F-67' >' ?' P' ' 5 "7!"+ <' ; 77' Y3' 45'
)9-/',1 C' A7B7C4' 374?
!5'7" 'Z$' ' 'F "6I' #& *% '8 &+'
% *)'iL' ' ' :' $ ' % *5+,' =' 'CF4'4@7'?>=7'
=F67A'4@>4'@7>A<' >&&>=' A7><' >&F>U<Z' K F' 2 #
@* $ ' ' *' ' %) ' [&M7' C>7'67A=3??3L7'=F67A
&) ' =(')' % ' % ' +&&
H E % ,"!&[' 7+ '48 % ,"!&' '=:7/('
' :!" # $' + (0
>VA6'@ & '@ *' ' 3L' 333';7<',5' '@7>A<' A'
FC?4>M&7' ?>I' ?@7' Q>?' &344&7' M7447A'4@>C' >' =FA6@AF<347'
v:5' 8 ' * ' ! G ' 3K' FU' =U?4 V7' >' ?7' F"
=F6@AF<347?' 4F' Q>4' U6FC' IFU' 2 ' ' ' ' F* ,'
*/ *! ' ;35' C' @7A=>6@AF<347' ;,5 ' Q>VVFC' 4@>4.'
B>U'M7'BFCL7A47<' 3C4F'>'B>A4' -; '' 4 % B

6R>

(6' N8 - 1 "OI' ' ' - 6 I' %&'
('!" # $!%&'=. ' ' (# "#+!(#'& $!%"+
> ' 8 & ' * $ '5(% *' ;%) %5) ' C7 =>I'
8CFQ' @3?' =7>C3CV' MI' @3?' =F63CV' %*' # ' 4 ' ,
) '% +%! U&&F"=U?7'U&' F63CV?'Q@3B@' 6A7?>V7' @7'&F?7
F" 7>?FC >C<' BFCB&U<7' 3C' >V7' .97;' 5 #' *''
*)& ' KKKL3 FCV =7&>CB@F&I' =F63CV? Q7A7' 67A3F<3B>&&I'
?UBB77<7<' MI' Q3&<' A7CE37?
% 6' % K' # & ' % ' ++# '%6 ' ' ' '
6'
8 6'N8 - :1 "/I'/ / '%' Z$' ' 'F '@'\'
%(!' 8 &+' H'*(#,&"#/ ("87&++7)' .&*"7,&&,'
2/6 B' '"# 8 ,' :+&' ,&0&'!&,' ,:77'+ " "!7&++
> ' ' :%)*6'B' %+'%'3' '33H' M' FQ7'>' =?B@37"FC'>&&
=F6ICV'FF&7?'FA'=77' .7+*' # L3'%)*' 77'Q@7A7
IFC' &344&7' =F63CV >=M7' F" =3C7' 4'?7&'7@>4@'4>CV&7<3C'
BA>Q&3CV "A77A7')/6-' 4 '@' ' ;7<',5K3'+ ' F>6]
3CV' 7&>CB@F&37' .6;+=.;' ' (% F'%,'N' ,
=F>63CV' FL7A'QFU&<'VAF0' '6&7>?>C4'!7&&FQ' .67:<' #'
'333' @7' =F63CV'FQ&' .97) s' % *' KK'
FQ'?><' >C<' =F63CV' U?4'&3'7'M7' 3C' =3V@4I' U6347A'FC'
Q@3B@' CF' ?UC' 7L7A'?@3C7?' ' # * %';% 5
+ ' F63CV ?FUC<?' B>=7' 'AF=' 4@7' 4A777'>C<' ?8I' >?' '4F=
FAAFQ'Q@3?67A3CV 4F' 3V@4
&#'&' E "#/")'%!' ,'"# (' 8 "#/' 8(###&
+ 4 ' & ') ' (&'=' L333' @7' ?34?' =F63CV&I'
4@3C8C4>' 'AF=' MA7>8'>?4' 4F' M7<.43=7
!' 1 "+%' 6' 7+' V 8 "+%' ;' 8 F
N I"+'%N&' Z$' ' 6B'H'F"+:' N &#+&' "' "+' (B"#' !'
!%(!' $ ' ' '!% :/%'(&("#/' 8:'%&(7"& I\
>' !: ",7)' ,&*"7,&,' 6
)'% 'C)& '*' 7F' (7F<7'>MFU47'>?'>'M7?'4@>4'C7'BFU4@7'
CF'QI?<FA>' ?'@7F' Q7A7'F'">CF4@7A'QFA<47'4@>4'F'&B'4@3B&7'
ICFU' F' M3@F&<7' ?UB@'>' =F6&?B@' M7?4' >MFU47' @3A7' 4@7A'
<AFU ' % ' C % '!%'' %%' 3 A3C' F&&' >=M' 5 U'
Q7C<7' >MFU47' >?' =F66I?B@7' % ' =>?87<7R' =7C'
4@>4'CU?47'Q7A'@U'Q7A7
4' 7'%%
) ' :%)*6'B' %+'L'K' '33H' 7>' =F4@7A' ?77'4@>4'
@3=' 7k??' FFA' F6674\' 2 >>' ([5'%
I7'@F&<7'Q34@4@>4'=F63?@7'7&'7' ** ' 5 *G '
*-' /' % ?' =F63?@' FC87?' >C<' 'FF&3?@' !A37A?' <3<'
Q7>A7' =F?4'BF=='FC&I' M>)+M " ' ! 'B' * '
, ' %' $ C77<' CF4' M7' ?F' =F63?@' >?' CF4'4F' M77U7' A>4@7A'
4@7'&>CVU>V7'F"'4@7'@>C<'4@>C'F"4@7'4FCVU7' ,)
$' ' 3*' % >' % A7??7C43CV' CF4@3CV'
QFA4@I'L37Q'MU4' =F663?@'4F37?;3C'A3<3BU&FU?'>M4??
8 ;=HUD63H5' %-' P' ' ' 'H" <'
"=&# ! '8 "#/' '(:+"#/ 8 "#/' '%(('!& "D&,'
6,'(*&(B'8&7(#'% 7)' ,&0&'!&,
2> 2 ' 1 ' - '*-' % '3 ' @I'>A7' =>CI' F"'4@I''FA'
&FQ7A?'?F'<7>(?'F=F63?@'?F'=7&>CB@F&I'Z ,)*' FQ?'
($ / '+'L'[3?' >' ?><' =F>63?@' <3?BFC?F&>4?' 7=67A'BU4?'
F'4A' >C<' YU347' M>C3?@7?' >&& =>C&I' A><3FC>&'H FI ' ,*K)'
' C ' +// ' %$%' 8)*$ ' '
?4U63<' >C<' =F63?@' >?' Q7&&' >?' ?F443?@' >C<' 'FF&3?@' 3 47'
: & % **' !';% 5 ,)' QF=>C' Q@F' '3><
M77C'<A74'U&'>C<' =F63?@
&#'&' $?! 1 "+%?)'%! E "+%#&++
' ' ' ' F ' ''F*' ':' * 5 % ' U?@' ;YUF4@'
@7?5 4@FU'>A4'4FF'?BAU6U&FU?#' 4@3?'3?'CF4'=F<7?4I'MU4'=F63?@:'
C7???' RT ' ' * *7' KK3K' 8?' %
7A7'FC7' =F63?@&I'?4U63<'>C<'?F' '3K7<' 4F' @3?' 6F?4UA7'>?'
3'' @7' Q7A7'>'MA7>4@3CV' ?4>4U7' %* *' ' :%$%)%' '
6'BK3L'"I'<7VA777'?@7'7&&' 3C4F'>' 67A'7B4' F63?@C7??' FA'
?4U63<34I' % ' ' #' ! %' '(% &'K3';3) 5
'4&3?'=F63?@C7??L>C3?@7<Q34@'@3?'Q3'7[?A74UAC' * ' 3??'
3 + ``d' FU'@>L7'M7@>L7<'=F6M@&I'F'&>47
7("7'N8 1 7(I' '*0 ' ! %' ' 7+' 4F3
8 7(' 3 8(' "77(' 8 "77(' 8 7("'F7(' F7()'
Z(' (7()(7(8' $!/ / %(" #& $!%& %(8?
8&,(#' '#%(.'!(#!+' $ (7(.(' ,&+'&#,&,'$ 8'
+' (#,' (.+*%'%(=& +&!!7&,' # !%(!' ' (+!'
(#,'8(' "&,' (7(.(' * 8&#
OP P' 1 - 2- 'k% 5 ',+' FUA' QFC<[AFU?'
4>&7?' '' F6&>?'37AB7'IFUA'@>C<'@>?'4>=[<' C<'=FC?47A?
4@>4' IFUA'?QFA<'@>?' =>3=[<' % *' ! ' & : *+'
%! % B>?' % F'3C?4>CB7'FBBUA?F"'>' F6&>I'@>L3CV'
M77C'BFCL7A47<' ' 4 @ + 'C% &CR& @7'
@7443?' >3A?'>C<' F6&>@?'Q@F'FBBU6I'&>C<'3C>'<'
V7C7A>&&I'?7&7B4'7&7L>47<8CF&&?'FA'4@7'?347?F"4@73A<Q7&&3CV?
F6F87;='3$6Ja(5$=FHZ76FA8;=F H6) H85'
7+'8(*N&I (*B'8 &'%(*B'8 *' Z 8"?
!(!"=&' $!%&' ." ,1+# !&' !%&' $ 8+$* /*&'$*/'
%G&'%3' .=" :+ "#!& &!(!"=&' ' :! ##+'!%&'
&=("7"#/'$ 8'"# ##+! (7"(#:+& "+' # *' $*/* (H
$' '#(8& /"=&# "# &*'g&(7(#,'!'(# *7'!%&'
/ * % 3' * B5 %%'! ' "# (+8(#"(' ! ' !%&'
#"/%!F0(' @*!% +')+ ' (#,'"# :+! (7"(' !
!7"&'." ,+' (+!%&' $ 3'6**6**&
S P' (3C' "3?B@F'" %"' $ '(' %'!';% ,5 %**'
C7'F'"4@7' =7C'?@F4'>'-(=FA7 2$%8[' ' ! ' ('
M' + %' 3'L3'%',' @7' <F&7'U&'BA!F'"4@7' =F47:
6FA8' %+'F*, 3'C ! ' + % %' 63' 3' *
* D! * %'! c ,=Z'>C<' FA?' ' Q&7&' 3V@4H>A 3444&7'
>Q76>Q8'BF&FC3?4?' F" >C' 37=7C[?' >C<' ' ' '
*$ ' ' % $ %' %' KL333' @7' ?Q-.(
6>Q8' FA7' FA8' FA' F67' >Q8' 3?' BF=='FC' 3C' =F?4
6>A4?' F"4@7' BF&FCI' % (' /' 1 % ' G' + ' C' ' '
F6F87' =>!63B8'FU&' =I'7I7?' ' 6*+' ' +'
)' U&I'+0+' @7' ?@>67&7??' =FF6FF'?77C37<4F'B>?4' <FQC'>C'
7L3&7I7'>?@7'&3447<6>?4') # '*+ ' % %)' %'
%'!'%,+' C'4@7'VU='4A77?'4@7'1A>F6F87?[2-V'+3'6*+6**&4
Q7A7'B>&&3CV'4F'FC7'>CF4@7A' % ' 1 ' ? / '*-'
% ' %' 7'?F&<'>'?4>43FC'3C' 3B4FA3>'>C<'4@7I'?>3<
@7'Q>?'>?'?3&&I'>?'>'1=FA76FA8'-'
M ' % ' -' (?4U63<
' ' ' ' ' ' ' -* $ ' ***' %, ' @>4'>'
A7VU&>A=FA7.6FA8' 'Q>?'4F'M7'?UA7
4' %&' # !& $!%"+."
S P' ('3C' "3?B@F'" %"' $ '(' ;% ,5 %**
@7' *?!+' , 7&$:7 ')' $'-8 &' B'-'

8 / ; (J , 9D

+ ' '%' @7' U?4A>& BUB8FF'?6F87' 3?'=7&>CB@F&I'
CF47 O<' F.6F87[')99+' O& N %' 6% ' ' 7'>A7'
&U&&7<'4F' ?&776' MI'4@7' =7&>CB@F&I' LF3B7?' F"'4@7'C3V@4'M3A<'
F<>AVU?'1=FA7.6FA8' \-
$' 8 Q ' ' 6' 8+Y 6 8((!!' 8 F
(!N!' 8 &!!' ZL' 7!& (!" # $ $%/*'=(' $
I' ' 8 ' ' (' + #/&$ ' (' ' (### #
% %'))' ! ' % ')*V' '+ +' !FA' =F66>43?'
4F' 4@7' B>&'74FUA3. ' ' 6 !'+) ' !FA'333H'?B@736'8ICCI?'
4F' =>8' =F66>43?' 'FA' 4@7' 4>&&FQ ICV' F" 4@7' >=7?' 4
6 !' ' ! FA' =>66>443?'>C<'4>66FUC3?'Z=' >>' '
' % ! :% %(5 %) 47=' CIC7' =F66>43?' =FUC434'>&&
?7AL3CV' 4F' ?3C<A37' 67B73?' 2 ' @ ' *+'))*'
' ' 34@'4@A7' =F667443?' 4F' ?7AL7' 4@7' ?>3<3?' 67B7?
8 ' 'B C' 7+'V 8 %&!' Z$'
0,' F \
' +&,' (+' (# &#,&("#/' (' &77(!" # $ ' (',.(.)'
(' /" 7' &!'' (' ,(7"#/' (' $(= :"!&' 7+' :+&,'
#!&8 !: :+7) NL' ($!& '+&#+&@!'$ ' (' /('7)' ,&++&,'
' $ "= 7 :+ * 8(#' 6 ' %)
./;'4& #'G' ' % ' +' * ' 'S',' M'
C<'=F667+'IFU' Q7A7' M7?4' F' 4>87' 4@73A' 6AF' 7A?' ./*:'
0 '4A' % *'(' ! ' K3L':%)* 5 +)' (
3C?43CB4 >BBFA<3C4' 4F' Q@3B@' >A7C4?' &FL7 4@73A' B@3&<A7C'
4@FUV@'<7'FA=7<' >C<' U?7' 4@7=' &3&7' =F6674?FA'&344&7'>6?7?'
,6.*' $ '-%' * ' 3L' 8?' %* ' %)+' =F667&
=><7'F"'6A7443C7??'>C<'6A3<7' .6-/'8 '4A' * %) B' %'
'333')+' ?'@7'F"<Q>A'3?@'>C<'>MFA43L7'?3E7' 1 Q77&'&344@'
=F667&' 4@7' 'FC<' '>4@7A' BA37?' 2 ' J N' $ 'F *>
C% $%'' * ' &&' 47&&' '>4@7A'>C<' =F4@7A'>C<' 7VVI'
Q@>4'>' =F667&' IFU' @>L7' =>7'F"'IFUA??&'')6+/' 4 '4'
' ' '%'$$' * 9 $@>C<' A>4@7A'?77'@7A?<7>C<'4@>C'
=>83CV' ?UB@' >' =F667&' F"'@7A??&'' >?' 4F' AUC' >MFU4&' 387'>'
L>VA>C4'6&>I.>B43CV' .9;' ' - % ' *
J %'!' 'EF' @3&7'4@7'=?4'3C?36 3<' =F667&4@>&'7L7A&FF87<
3C'>'V&>??' 37'6A7'7AA7<'4F'FC7'F"'4@F?7'A7>?FC3CV<>=??&?'
' ' #!&8 !: :+7) (7"&,!' (8(#
. ' ' ' ' *+6 ' F % %' ' %%%' 7B&' 4@3C8' <FC[4'&FL7'
7'Q7C4F'4@7' FA<' >IFA[' '7>?4'>C<'<A>VV?<FCV'Q34@'
@3=' 4@>4'Q3?7' =F667&' FA<' I447&4FC' 2 6!' ' >A'
' =F667&' 3C' AF?L7CFA' YU>A7' @>?' BFCB73L7<'@F67?'AF='
4@3?'A3?3CV'?4FA=' P74B R'
'E4 ' (/' 7' % BW
P '' E ' 9 **' ' 4 -' 6B 2T
' '/ ' */! B'>'6U6674' =><7'F"'A>V?'>?'>'=F6
3?'=><7
4' 'QFF&&I'L>A374I'F"'<FV' N $' 'S X
2 >Z L ' ' ('3C'C %!-* !' ! '' 7B')04'
@7'BUA&I'=F667#F"'4@7'A7?67B4>M&7'@FU?7@F&<'Q@F?7'&FB8?
>A7'B>AL7<'3C4F'?F=7'>M?UA<?UVV7?43FC'F">' FC
! 2 &!-F' % BB>' Z$' ' F I
' / "8(' &
> 'V 7+ % (' %6 % ' ,,,' AF&'2' C<'>&M734'Q7'777'
4@7=' ?F=743=7?BFUC47A'734' 7LF43FC' I7<'C7L7A'<3<' &<'
V7'B % !' 8>7'6A744I' F6674' ;FA3V' *'7+ '
' ' - '6 '$*+ =
F&)&,' !8>7'$ 8' $'
8 6'N8 E "'\I' 6' B' Z$' ' F'
F' '(' "8('"#/' (7+ ' (#"#+!(#'&' $!%'+
:/)7<' # '(% '22' <=3C3?4A3CV' =>447A'F"=3A4@'
Q34@' 4@73A' A3<3BU&FU?'=F6;D3CV?' +'
@+ 7+' KEF' UB@'>' =F663CV'>C<'>' =FQ3CV
8 67 ' 2 4 '
M' '>\' :'..'#/' *'" "#/' *'!%' '(+*'!%'(' 8
' 4 # '@' $ / 'KKK3' @7'@7>4'Q>?'47AA3M&7'>C<'
4@7' $*/ ' 'F"'4@7'&><37?[' >B7?' 7L7A&>?43CV' ,(*' 6+ ('
' ! ' ' ' ' =74@F<' Q@3B@' BF=M3C77' V7C7A>&
B@&FAF'FA='C>ABF?3?'Q34@'A7YU7C4&I'A767>47<'&FB>&'=F663CV?
F"'4@7'6@>AICK'>C<'&>AICK'F"'4@7'6>437C4
"+%'Y'+&&' '%B
"!' .+'$ 8' $'
8 $'N8NT "I' Z$F' ' 6B' ' I
$' $ %(" ' $ 7'(/&' &!' ' &+&8.7'#/' (' 8 '
%(='#/'!%&' '%(('!& "+!"'+' $ (' 8 ' !%"'B
)6*7 # %' $' '?'#' %' ' 7(@3='6>A7'
F"'4QF' @3A<?' F"'4@7' >A4@' >C<' 6AUC7' 4@7' !3MA7?' >C<
=F66I' FF4?' E F ' 'N 3C' % +' ' 7B', ,0,'
@7' =F66I'@7><'M73CV'4@FAFU@&I' >6U>C' % +'L '
+$ $ (' J -';% ,5+' 3?' =F66I'M&>B8'@>3A
4' %' ' #! 9"'(!&,' N $' ' 6-'" . I
3\5BF3*@ & ' +' '(' ;7<' V>C5 <AUC8' %'
!' 8 ?' 6' 7+'V 8 +&' Z .'(#&9?
!&#+" # $ ' 6 -' $' /' !& 8'
$&#,&(8&#!$ ' ( ) :#/' /" 7
2 >'L ' ! (' 333';%)*5 ,'M' 344&7' M3M&3CV'
@I>&7'>C<' 7787'4@>4'6A7437' D67?' 79-' ' % '$'
@% ' 3'A'>3&@'3[>3&@'=I'V7C4&7' =F6?'MU4'$<F'8CFQ'
>'B>?4' 2 ' ' ' ' ' @+ B' 5' &344&7
6A7437'V3A&7#'>'&344&7'=F6??' .7+.'O# #' ! % ' &3' 7>A7'
CF'B@>??;6A7443?'=F6?5'FA' 77A7'Q7'>A7'A3F4'C734@7A'A7<
CFA'>&&FQ' 2>*L ' % /' A7'<' &' @73A' F6?3B>&&
>CB@F'?4F&7'AF='@3?'3&&'>LFUA7<' F6??
8 (' % /^B' Z(' $*/ B
$*/ '$*/&' ' :/F, /' '3C' ' +,'
! ' 2 +"'(7'%' 6' % 'F'=' ZL'$' ' -'
' ' F \' L "B"'(' +"7&,'"'%"7,' &!!"+%
"&FUC4F*' * ' %)),)% 7K6&>3C?'34'>?'14@>4'B>YCF4'?77'
Q7&&[#BFCCC7B43CV'34'Q34@'1FUA'6@A>??' '*/ ,!>' @7'
7K6&>C>43FC'@>?&/7C'BF637<'3C'=>CI'&>47A' 374?
,) L ' % /' A7'<' &' @73A' F6?3B>&&
@U=FA?'M73CV'C7L7A?>43?'37<'MU4'3C' '>CBI3CV4@7=??&L7?'>?'
S3C:(' >C<'A73VC3CV'Q34@' @A3?4
-' !"'B'N8e]2 +!"Bl' -'0 ;'6A'I %
`' '"&%(#,7& $'(' 8
%*K'!*' ' ' ' *' %')' 7B' >CV'34'P>'63B4UA75'
B>A7'U&&I'3C' ?F=7'6>A4F"'IFUA'AFF=' Q@7A7'7M>4A?'>C<
B>C<37?>C<'=F6.?43B8?'QFC[4?6F3&'34' E K' 3??'
3C' [?4A>CV7' B C ' ' UA'B>C<3<>47'M'L>?4&I'&387'
>&CF6(43B8'FA'A>4@7A'>'4>&&'@F6.6F&7

f?4'UBBIFC?`F"\FFF<' = (7A'>C<' 6F&&3B! -g, ' ' D $: %
<7?`F" FA>B7 #' FC4>1C3CV' =UB@' = FM3&34 1 '>C<'
?Q774C7??7 ' `RB' # ' %/ ' % 'KK ':%* 5 %, '@7'
7KB7&#7C4, FA>&3437?-' BFUB@7<' 3C' 4@F?7' 3CV7C3FU?' =M&7 = ?'
! ' $ ' J % &' *+ ' !' *'! B' *- 0 *+ ';%* 5
*' 7 6F6[<' 3C4F' !' % ('HU?4' ?' '@>< 7C<7<' < 1'
FA>&34 !)9 *6>+' ' ' ' %@ L' h' ' ;% +5
%, ' FF`F'47C`C7` P UCC3?R' >&&7' 3C4F' 4A3L3&' = FA>&34 ! ' +'
($ ' ' ' ' ' @7' *'- *' $ % ' #' >'
?3CVU&>A' =3?B7&>C I' F'' >&&7VFA I ' F'' = FA>&34 ' >C<' F<' F+ 4>&7?'
)966 4 '2 " $' %& ' * '33 ' > ' ^ U>3C4' = FC83?@'
= FA>&3437? >C<' ?BA36 4UA>&' YUF4>43FC?' ' '2 # ' @ 0
%' '%+#' @>4' 3?`FC&I' >' <A7>=' 3C' @>UB7A ' M7BF = 7?
4F' U?' UC<7A?4FF<' 'AF = ' BF44 ' >' BFC?U = = >4?' @3?4FA3B>&'
= FA>&34 I' >C<' 4AU4@

j;bM' (7 +&#+& '"#!& &!(!" #N+&& (I '
(7+ ' !%&& 8 (7 N $'(' $(. 7&' &!' I' 6
)'&)' ' ' +' ('@ ' '), " 'U&' I 7'4@>4' @F&<7C' 4@3?
4>&7' >' 'F&I 7 >874@' 4@7' = FA>&347VFF<7' = 7C' KKD # ^
' ' ' ': FKM 5 +)' '1 4' &I 87' FC' 4F' = FA>&147 F' <A>Q'
I 7' C> = 7?`F"'4@7' 6AFV7C I 4FUA?' "' = >AI 7 ')'K(IF' +
* ' %6 ' %%' 2 * *'' B' ' '*+ 4 KKK ' ! A73C<3?' I 7' = >I '
'3C< C' 4F' 4@3?' >M3&&' >C7' VU<7' = FA>&3437 ' % ' J "'
+ 6' AF& ' "U4' Q@F' 4@>4' A7<74@' 3C' 4@7' MF87`F"' 4@7' = FA>-'
&1 47?`F"'4@7' B@7??7 ' ?@>&' 4@7AMI' 67AB7 IU7 '4@>4' P74B R' K)>>'
'@* ,0* 6 'KK3 ' % '* A6@7U?' Q@F?7' ?Q774' >A67 '
C43?7<' A77?' C<' FB8?'4F"!F&&FQ'@3=' >&FCV#' @-' = FA>&3437'
F"' Q@3B@' 3?' 4@>4' P7(R' % (' ' # (' ' % %B'
@7' = FA>&34 I' F"' 4@3 ' 3CU7C4&FC' Q>?' 4F' 7K6A7?7?' 4@7' B@77A'U&\'
BFCU7A?>43FC' Q@3B@' FUV@4' 4F' M7' > FCV?&' A37C<?

&5 (7 ! :!% '+"/#'$"' (#'&
1>>' L (' **/ ' *' *'%'L' *' ' BF<' = F4@7A' >&&'
4@7' 6>A3?@?'?>I ?' I FU' @>L7'?6F3&7<' = 7'>C<?'F I FU' = >1>87' 4@7'
'AU34?' FC-4 ' % ! ' @7A7 ?' = FA>&34 I ' @FQ7L7A '3C' @3?' A76&I
$ ' '7"!& ( )' 8 +"!" # '(8 (7!7&++ # (' 8 (7"D'#/ ' 8?
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8&#!( )' (' 8 (7 (7!&/)' 6
)'%+ @ ' ' '@* ' ': 7AB I' FB 5 %K*' @7' = FA>&347' F"'
4@7' @FA?' 4@7' VFF?7 '>C<' 4@7' ?@7767 '4A>C?&>47<' MI' >C' F@C7'
3<V>47 ' % ' ' ' ' $ %% ': * 5 ' F&3C74 ' 4@7'
'A7CB@7' >UB4FA' F"' 4@7' = FA>&1 4 I' 7 L66FC' 4@7' F = >C47' F"' 4@7'
AFF?7 ' %)-*' ! **' (@ '3C' ')*+ '74B ' %*>'
$ % ' @7' = FA>& 4 I' F"' = F4@7A' "U= MI 7?' &>&7'
' ((' + ' (2-Q (8?' :%*K%5 K+F @76A7??C47<
>' '>3A' ! > 7 MU4' FC' 4@7' F4@7A' 3<7 Q ('4@7' = >V7' F"'
7>4@#' MI' Q@3B@' FA>&34 I' / ' !' FA4>&34 I' F" = FA>&34 I' >???<
4@7' F4@7A?' P0 ' F4@7A'6>3C47A?' F"'4@7' ?>= 7 ?UMH7B&R' = FA7'4@>C'
4@7 I'<3<' @3 = ' %4
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66 '><F647<'3C'4@7'2 4@B' 'AF = ' !A7CB@'&347A>A I' @3?4FA3>C?#
4@7' ! '$ * % ,@>< 4@39' 7?C7?'3C' 4@7' %)4@>B' MU4'3C' CV&3?@'
Q7 '3C<' FC&I' $ * % '>C<' ! * % / %,
%** ' % (' *'-B / ' '--, ' &* (' ! 4' L7AI = >C '
FA>&34 I' K F3 A ' /* ' /-@ % = '3 '%%' @7C'
4@7' = I?47&37? B7>?7<'4F' M7'6&>I7<'4@7'?QUMH7B4?' F4'4@7' <4> = >'
Q7A7' CF4 4>87C' 'AF = '@3?4FA3B>&' >B4(' MU4' BFCA3?47<' F"' = FA>&
A7>?FC3CV?' 3C' 6A>3?7' F"'L3A4U7'>C<' BFC<7 = C>43FC' F"' L3B7 ' FC'
Q@3B@' >BBFUC4' 4@7 I' Q7A7' 2D 7<' = FA>&3437?' % ' ' '
% ' '+' $B' '9 '4C' FC7' F"'FUA' F&<' CV&3?@' FA>&3]
43?' 4@7' ?7L7C' B>A<3C>&' L3A4U7?' >A7' A76A7??C47<' >?' M7?37V7<
MI' 4@7' ?7L7C' <7><&I' 9@@-
6 ' %&' , '! "#&' +)+!&8' ' #'& #&,' *"!%' #, : '!'
(#,' , :!)' 8 (7 +'"&#'&
)' ++' ' #' / ' '3L ': F&#?5' % ' U = 'F4@7A' LC4A7Q7'
F63C3FUC' F"' = 7C' 3?' ?UB@' 4@>4' ''FA' 34' @7A' BFCU7A?>B3FUC' ?B@>&'
CF4' M7' 3 = U3<' 4@7' QFA?7' = FA>&43 ' FA' 7& ?' CF4' >?7C?' CF4>M47 '
VFF<' L7A4UF?7' = FA>&47 (' ' ! ' % ' '33 ' KL333
:' ' @7' 7C<' F"' FA>&3437 '3?' 4F' 6AFBUA7' 4@7' ' 7B43FC?' 4F'
FM7 I' 7>?FC '>A4<' CF4'4F' 3CU><7'34 ' %) '@ # ' + $ ' V ' !
' K3' :' %)' 6FC' 4@3?' VAFUC<' 34' 3?' '> = ' MF|<' 4F' 4@3CB ' 4@>4'
= FA>&34 I' 3?' B>6>M&7' F"' <7 = FC?4A>43FC ' >?' Q7&&' >?' = >4@7 = >'
43B8?' %* ,)' Q3 !' F + ' '33 ' I33 ' @7' &7>AC3CV' F"' 4@3?'
67F6&7 ' BFC?3?43CV' C&I' 3C' = FA>&34 I ' @3?4FA I ' H6F74A I ' >C<'
= >4@7 = >43B?' ' $ @ ' ' ! ' ' *' A3C]
B36&7? 'FC' Q@3B@' 7L7A I' 4@7FA I' 3C' 6@I ?3B?' >C<' 7L7&I' = >K3 =
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M ' / ' F3C4?' F' '7 4@3B?' = FA>&' 6A3CB36&7?' F A' AU&7?'
) ' ' ! ' % '33 ' KK&3 ':' *' @7A3C' &I7' FUV@4' 4F'
@>U7' @>C<&7<' U?4F = ' K7AB3?7' >M34' <UB>B&FC' P74B R#'
4@73?' >?' 4@7' I'@>U7' <747A = 3C>47' L?7' 3C' = FA>&34 I 7?' 'AF = '4@7?7'
4@7' = 3C<' ?U' 7A74@' KIK>') ' / ! ' >' ++*' 6'+' ''Q7'
BFC?3<7A' >447C43L7&I' 4C3?' AF67A4 I' F"' U = >C' >4UA7 ' 34'
= >I' 3C?4AUB4' U?' 3C' L7A I' '3C7' FA>&3437?' '% +' ' 2 '
! ' ' ' 'K33 ';% 5 + ' @7' &7447A?' F"' FA<' @7?47A.'
'37&<' = >87' >' MFF8' F"' 4@7' = 3CFA' = FA>&3437?' >C<' 4@7' = >HFA'
3 = = FA>&3437?' F''&3'7' K)4 ' V 'L' ' @7' = FA>&3437?'
Q@3B@' 6AF47B4' 7L7A I' 3C<&3L3<U>&' 'AF = '3'7CV' @>A = 7<' MI' FA@7A?
' ' 6>A43BU&>A' ?(47 = ' F"' = FA>&?'
K) F' & ' *) 'B > 2C' ' @7' 4QF' = >K3 = ?' F"' @3?'
= FA>&34 I' Q7A7 '4@>4' P74B H' K (?' @ # ' % ' ;%))5
*% 7' 4@>4' ?@>&' BF&&7B4' >&&' 4@7' FA>&' U&7?' F"' 4@7' @3&F]
?F6@7A? Q3&&' '3C<' 4@7 = ' 4F' BF = 7' ?@4A4' F"' 4@7' FA>&34 I' <7]
&3L7A7<' MI' FUA' >L3FU3A' ' L " ') '+' 'KKK3 '
,)% 7' ?FFC' (6 7 A3 7 C ('4<K>4' 4@7' 6A3CB36&7?' F'' @FCFUA' >C<'
3C47YVA34 I' Q@3B@' 3C (@B' A7VU&>47' 3?' FA>3C>A I' BFC<UB4' F''
FC?4>C4B3 ' Q7A7' ?U67A?(7<' MI' 4@7' &FF?7' <FB4A3C7?' F''
6F&343B>&' = FA>@4 I ' - (J ' ' * $ ' * '7'<% **5 ' 33 '
' @7' = FA>&34 I' F''4@7' F?67!@>'<' >'<3A7B4' 3C'&U7CB7' U6FC'
4@7' 6F&343B?' F''4@7' >V7 ' ? (' J $ ' F%5' 2> 764 ' 0%' C'
4@7?7?' <>1?' F''&I3CV' >< L7A43??= 7C4?' Q@7C' -BF = = 7AB3>&' = F]
A>&34 I' [@>?' M7BF = 7' >&= F?4' ? I CFC I = FU?' LA34@' FA<3C>AI' 3 =]
= FA>&34 I
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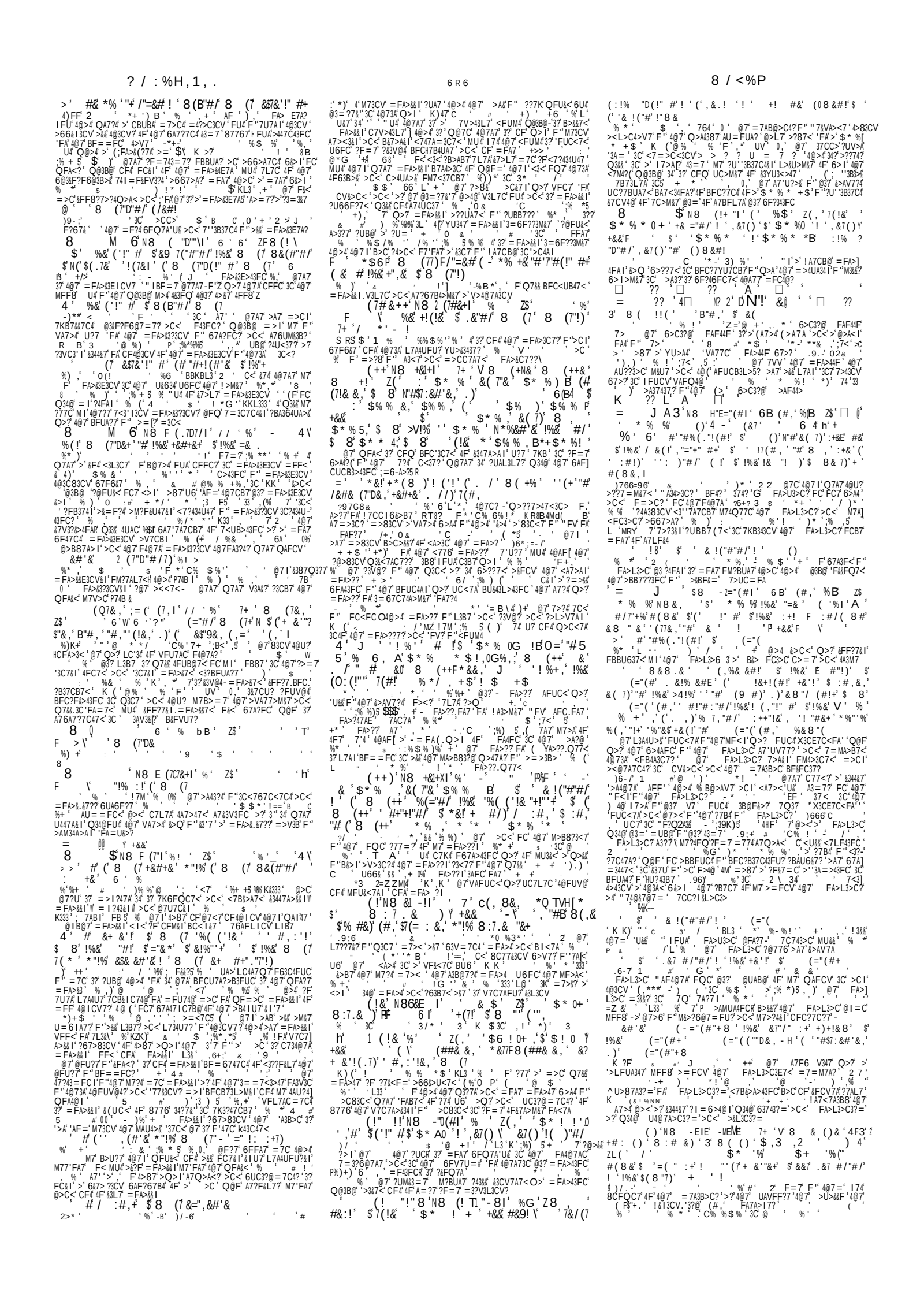

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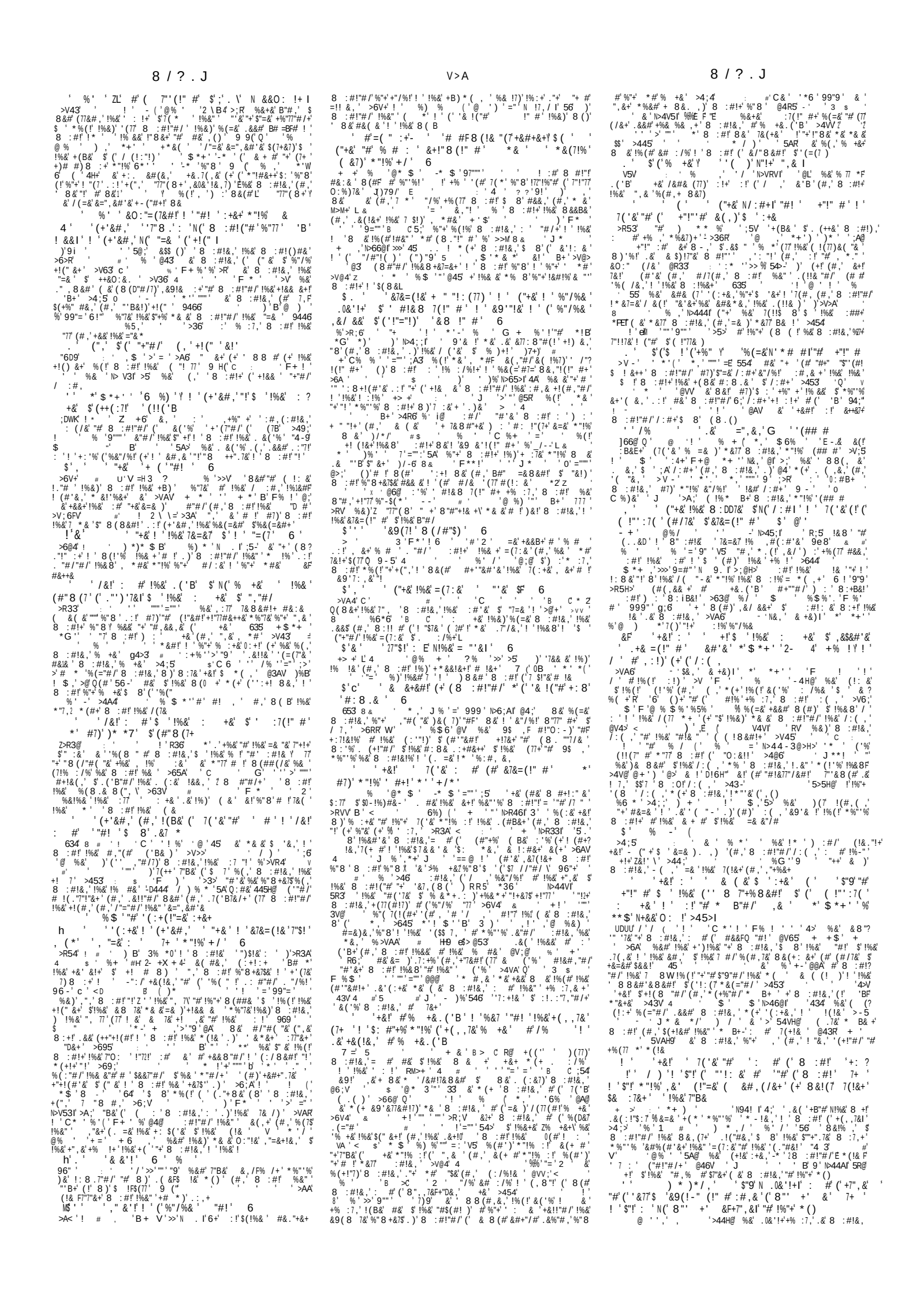

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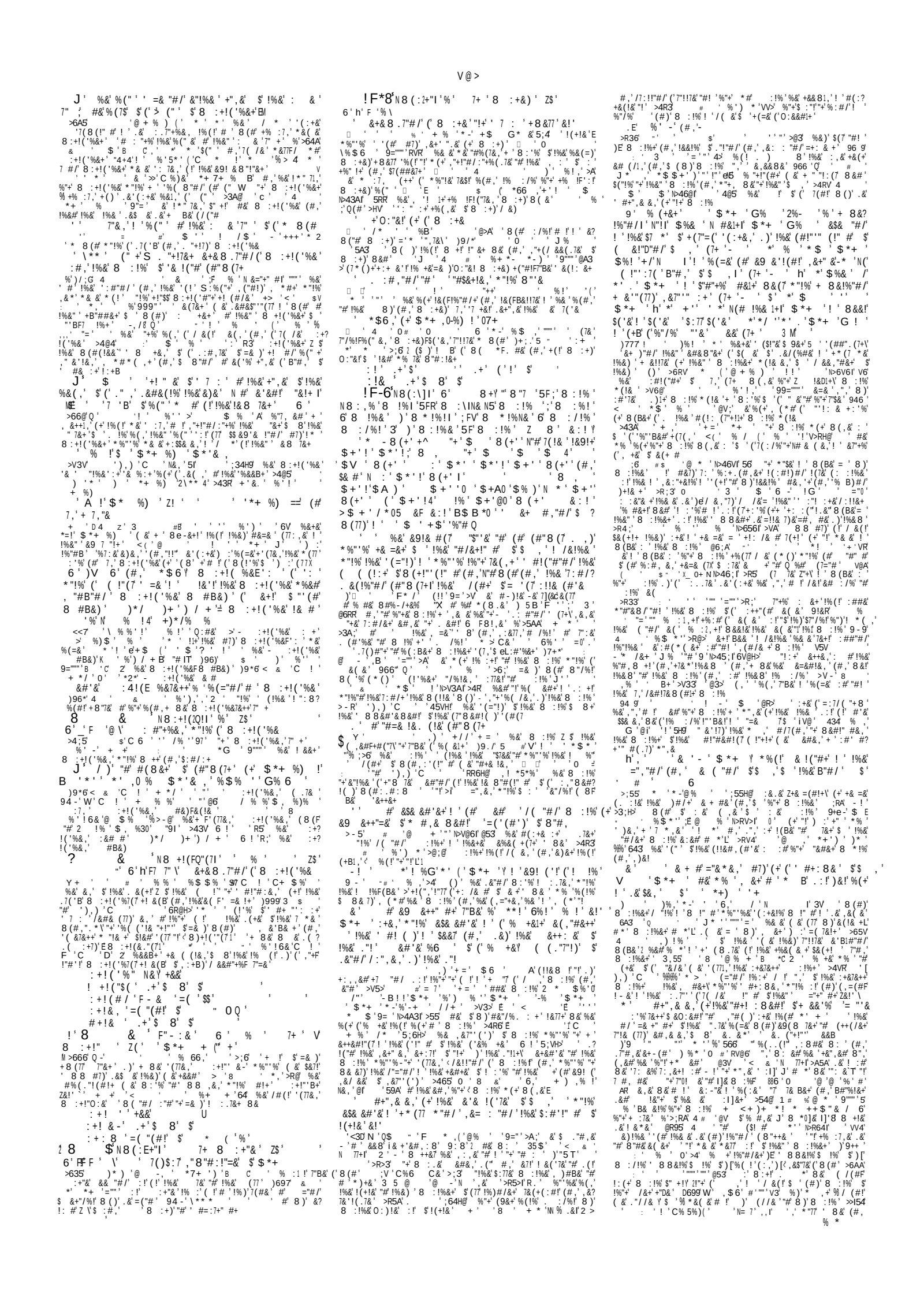

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$()#),'$(.7&+'(#,' ,"+'7(#,(+'!.(!EE*&&'+ #!'!'.&'+&,"[' !" :+7)' + *'#&' (. *'!)-6)' ? ') , V' N 8 8& ! ' @A6 % /& :&'!%&'!%)' $'(#,'/):&'!%&' 7("#(.+ E 7:'" # $'(77'8 "&#(#!'!%(!'#&:&'($!&'!% :' & 7!'O:&'#& &%& '&'!%*'+! &+ ((+ * 'W'F* ! ' ;>VH .H@' %)'$(,& '!%&',&:)7 :&'*% 8&=%(:&'% &'!'%(:&=)'7)&'8)&E' #(:#! #%)8'!%&'#(8& $Q%&+:'!.&+(",&! * #&'(#,'(+!&77 *& &',&"=& &,':#! '!%&'+(",& / ,')#/&', *(, ' Q7)&#(: ' 8)&#& (* '=('$$' " !7$$) & : & ') ' 6 ' #' 6FV' 8)(#N#I& ' Z$' " ' 'h'F '>5' 8&,"(! '(' < / F.&!*&&# ' ' $ ' %) %' '"" N>R3Af '0 'S:%"7B'T !%& 8)(#& +' $'!%"+' ' #!:#'!" #'= # !%&' (!' $' ,'E (#,' O:%"7B':&'!%&' 8)(#& +'= #'!%&' (!' $'8(#'L' > ' + (' ! $ * ' -'"# J *!*G' *)')'N>43;'RVA' *'% 7, !%(!' "+% +'+%:7,':&W8)(##& +'(#,'8&,"(! "+'.&!*&&#'!%&' " B'(#,'!7-' "#'& ! ') & # "# / ' 6 ' #'6'8 "&#"#+' Z$ ' h'F" ' \' ^' ^ ' < ' " '@ * ' * , % '' @ * ' * $ N>4@4f '@' . & !' 7(#,'%(=&'8&'(7"&,'8 "&#"#/' !%&'%&7 &' $'/ ,'! ' &, :'&' "!' "#! ' : ' &#/7"+%'! #/& ! ') & # 7&+ + '!D' 6 ' Z$' ' F l' (="#/'# '8&(#+' ' &+ :'&+ >-V' + (' / 'F' *') M]B' "8 7&'+(:7+':#+B"$:77' 8)&#7&+' 2) & # & '=("(#!' $' '6B) 7"(" ')"!"&' .+'$$' ' ,) & ' ' N&Y +&& ' ",+' (#,' ' ' 6 (*, ß' N &&'O: !+ I >4V:'Q' ' % %' 7(/&' B"#,+' $ *&,/-' B# *#' "#' #*(77 (+' E 8)7&+'E %&':+&,' 8 &' &+ &"(77)"#' O:( )'* B' >44J # ' ' ' F* B -* ' ' *, 'N 8 * I ' ' , "77 "#!&,'7"B&'(''/(,) 7& & ') 7&! ' .+' $$' #" "- ' ' ,) 7&!&& ' .+' $ 8' $' ') 7"& '=("(#!' $' ' ! %) # ' .+' $ 8' $') # (#!' =("(#!' $' " ' 6) # , ' 8) # & ' .+' $ 8+' $' ' $ R;' ' ' ' J % ! '>4>-'65' !& 8 '(#&':!%" ' &"'&' $' / 7,' $'!%&' 8),#,':#8 7!"#' %' 0 & ' B' ' '!%&'" '(+!' ! &#'%&+'(#,' 8(,& 8)#&+) # & '=("(#!' $' ") # &7N7' F"&7& ' .+' $ 8+' $' 9 '", @') #+& : #' .+' ' ' $ 8' $') , & ' .+' $' 0 =(" "$%' 6 ') + (" ' (77 ' .+' $ 8' $' 0 ' %B h' !) (& ' 6 ' 7+ 'R' 8) + ' (#,'+&& '", 7' Z %&'7(+!'&7&8&#!"#%/! 0$*, ' 9 $'F ':+&,' (+' (' * ,' .)' "!+&7$\' N &&'O: !' >6>> I' $' (7+ ' @ ZeV9;5A G*' **& ,b6& '>5'N (:,' 'RR5I' 7& 8)+' -* **& ' =, ' 8(B&'(#' 7& 8)+&\' "6"9' " ' * % ' 7+ '('8)+&' ' % "+&'8(,&'$&//&+'8"7B&' .:!!&'(#,'+ "'&'(#,'+ '$",&"#'(' (# 7) (& ' .+' =(' "(' ! + ') ( ) + N : I #'Y +&&) (! & ' .+' $ 8' $' " ' #' 6') ! j N& 'F" ' .+' $ 8+' $' " !E' D (8 . "O : &' N1Q0[D$$"8.DEBI' Z .&'#(8&' $' (' !:/:&+&'!& "!)' # !%&' (+!' (+!' $' $ "' (\' ' #(8&' /"=&#! ' '=(" :+' B"#,+' $', &++' 8(!& "(7 >4VR' 5 ' &' *5 G 6 + 'N (. "'I'(#' j &# , &++F/ ,+' %(=8/'(' "%("#' "#' *%"'9'%!%&' ' !! #!% &(,+' (& (++ '"(!&,"#' (" +'(#,'!%&' * 7&#$"77#/"'+' $!'(#,'$7&&)' 94-'F*!,(' % ' ;56H> '#&*'8(!& "(7 $'8 %("'(#,' +"7B"+'B# *#'(+' D(8."O:& D(#' .+' 'N8eVD+&E(.I' ' 7+ ' D((.&' :D((. ' Z(' ' *5! %6 'N8&, H' * % %6 %6 4' " '(#,'*"!%'&!) 8 7 /"D"#/' & =& +" #' 3 % %6 4' ' :!$ 8' $' (.'$+ % 0 6'<+ :7,F.&((.'E' ('!"=&' 7&' $' (' =& .' $' !%&' " !%' N,&+",& (F !"=&I' ' #0:/(!" #'$'B %6')" " I' #' ("#' :#,&' "+%' :7&Y #&' $' !7-+& % "+!"(#+' * % ' #' ' #,"!" #' $' *#"#/'(77&/"(#'&'! '!%&' . " "'B"#/' (#,'' #$ 8"#/' ! ' '& !("#' "+%' ':+! 8+' * & &' (77 * &,' !%&'&9& '"+& $'!%&"' * #' &7"/" # >V44' L "" ') ' 7"' '54V %&'#(8&'$'- D((.&+' N(, !"=&' (.+!*(+' (7"&,' ! '!%&"'(="7 &7"/" :+' #? $ 8"I)' @ ' ' ') ' '5RH@' (' % "+? !"(#'7"=*#/' #,&'!%&+*(' $'!%&' 8.+ D((. " ' 'N8'\vg&(."BI 'D' 7+ '(" +F'8 :+F' 8 :D((." ' Z$' " "' h'F"' C' $' & !("#E' "#/'!' !%&' D((.+ *5- %)' + ,'2 '+ '*--) '&!' I Y !%&'(#''"&#!' "!:(7 $'!%&' (#"+%' %: '%'+' '(77&,' .'(+'%(="#/.&&#' &F' ! "#&,-.)'!%&' D((.+'($!&'"!' *(+',"+:+&,'.)' !%&' (#"+&' % "+!"(#+' 8 ,"$'&,'$ 8' $"!' "+'+!"77':+&,''"#+ 8&'$&*' '%(&7+''#' ("# >VA6' ! 'Xh/ ! ')) ' '3 ' ' '":T %&#'%&' 8&#!" #&,'!%&' :+((.'"'' +&'('' ,"#/'! '*%" %' (++'*(+ +!"77 '&7&. (!&,' &=&) ' :#,(%' >V3>Q'7 s ' ;*+ $+' I"! T! V3@I E5"f # #& $!8%&,"(&7+'*%& &!%&)':+&' #7)' !%&' D((."'' "++(7' > 'Q' I I'9I ' I I I F+ - '* *-, g@R %&' D((.'"' "!: /)' 6 ! '>@6 %&' D((.'"' $"'&' 6 ! '>5;' %&' &+!+' $' D((.'"' '%: '%&+' 6 ! '>5R' %&' &+&#!+!+(!&' $'!%&' D((.'"' "!&' V ! ' %&'O:&+?!" # $'8"9&,' 8("(/&+' .&!*&&#' 8(#' (%,' D((.'"' %"+!"(#+ FE>A47>D '8-D(E"!"(#I'%' 7+ 'F"(#' Z$'!%&' #(8&' $' !%&' 8:+"'"(#" ' ' *5% ' N>VR6F3>I' h'F \' %((' !& "+!"'' $'!%&' 8:+"'' $' D(! ' ' *5% '@V@ %&' 8."#(!" #' $ 7()$:?? #&+*(#,' / ('& "8 (!+' ! ' < "/(E (' 8 &',&'",&,' D(!&(#' '%(('!& '!%(#' (#)' !%&' $' %"+' * B+' + ' '+$'>3 &.'@V5H>' %&' 8 +& ' *&7,+' %"+' !%& 8&+' ! /&!%& ' *'!%(.+ 7:!&' D(!"(#' &(+&'(#,'/ ('& ' D(E9!"+%' %' ' + 8&*%(!' &+&8.7"#/' !%&' 8:+"'' $' D(! ' D(E !"48 ' (!"+(#+%" ' $' D[" ! (+' (/(" #+!' !%& ' ' N>444f ' >5@ ' ,)' +"+!& E+' 7,' "+' (+' .+!"#(!&'(+'(#' 7, ')"+!'(#!%&'!%(!'#'=' #!%&' (!' $' 8(#'L' > ' + (' ! $*' -'"#' J *!%"+' ' #!:#'!" #'= # !%&' (!' $' ,'E (#,' O:%"7B':&'!%&' 8)(#& +'= #'!%&' (!' $' 8(#'L' > ' + (' ! $*' -'"#' J *!%"+' ' #!:#'!" #'= # !%&' (!' $' 8(#'L' > ' + (' "+% +'+%:7,':&W8)(##& +'(#,'8&,"(! "+'.&!*&&#'!%&' 7&+ + '!D' 6 ' Z$' ' F l' (="#/'# '8&(#+' ' &+ :'&+ >-V' + (' / 'F' *') M]B' "8 7&'+(:7+':#+B"$:77' 8)&#7&+' 2) & # & '=("(#!' $' '6B) 7"(" ')"!"&' .+'$$' ' ,) & ' ' N&Y +&& ' ",+' (#,' ' ' 6 (*, ß' N &&'O: !+ I >4V:'Q' ' % %' 7(/&' B"#,+' $ *&,/-' B# *#' "#' #*(77 (+' E 8)7&+'E %&':+&,' 8 &' &+ &"(77)"#' O:( )'* B' >44J # ' ' ' F* B -* ' ' *, 'N 8 * I ' ' , "77 "#!&,'7"B&'(''/(,) 7& & ') 7&! ' .+' $$' #" "- ' ' ,) 7&!&& ' .+' $ 8' $' ') 7"& '=("(#!' $' ' ! %) # ' .+' $ 8' $') # (#!' =("(#!' $' " ' 6) # , ' 8) # & ' .+' $ 8+' $' ' $ R;' ' ' ' J % ! '>4>-'65' !& 8 '(#&':!%" ' &"'&' $' / 7,' $'!%&' 8),#,':#8 7!"#' %' 0 & ' B' ' '!%&'" '(+!' ! &#'%&+'(#,' 8(,& 8)#&) # & '=("(#!' $' ") # &7N7' F"&7& ' .+' $ 8+' $' 9 '", @') #+& : #' .+' ' ' $ 8' $') , & ' .+' $' 0 =(" "$%' 6 ') + (" ' (77 ' .+' $ 8' $' 0 ' %B h' !) (& ' 6 ' 7+ 'R' 8) + ' (#,'+&& '", 7' Z %&'7(+!'&7&8&#!"#%/! 0$*, ' 9 $'F ':+&,' (+' (' * ,' .)' "!+&7$\' N &&'O: !' >6>> I' $' (7+ ' @ ZeV9;5A G*' **& ,b6& '>5'N (:,' 'RR5I' 7& 8)+' -* **& ' =, ' 8(B&'(#' 7& 8)+&\' "6"9' " ' * % ' 7+ '('8)+&' ' % "+&'8(,&'$&//&+'8"7B&' .:!!&'(#,'+ "'&'(#,'+ '$",&"#'(' (# 7) (& ' .+' =(' "(' ! + ') ( ) + N : I #'Y +&&) (! & ' .+' $ 8' $' " ' #' 6') ! j N& 'F" ' .+' $ 8+' $' " !E' D (8 . "O : &' N1Q0[D$$"8.DEBI' Z .&'#(8&' $' (' !:/:&+&'!& "!)' # !%&' (+!' (+!' $' $ "' (\' ' #(8&' /"=&#! ' '=(" :+' B"#,+' $', &++' 8(!& "(7 >4VR' 5 ' &' *5 G 6 + 'N (. "'I'(#' j &# , &++F/ ,+' %(=8/'(' "%("#' "#' *"%"'9'%!%&' ' !! #!% &(,+' (& (++ '"(!&,"#' (" +'(#,'!%&' * 7&#$"77#/"'+' $!'(#,'$7&&)' 94-'F*!,(' % ' ;56H> '#&*'8(!& "(7 $'8 %("'(#,' +"7B"+'B# *#'(+' D(8."O:& D(#' .+' 'N8eVD+&E(.I' ' 7+ ' D((.&' :D((. ' Z(' ' *5! %6 'N8&, H' * % %6 %6 4' " '(#,'*"!%'&!) 8 7 /"D"#/' & =& +" #' 3 % %6 4' ' :!$ 8' $' (.'$+ % 0 6'<+ :7,F.&((.'E' ('!"=&' 7&' $' (' =& .' $' !%&' " !%' N,&+",& (F !"=&I' ' #0:/(!" #'$'B %6')" " I' #' ("#' :#,&' "+%' :7&Y #&' $' !7-+& % "+!"(#+' * % ' #' ' #,"!" #' $' *#"#/'(77&/"(#'&'! '!%&' . " "'B"#/' (#,'' #$ 8"#/' ! ' '& !("#' "+%' ':+! 8+' * & &' (77 * &,' !%&'&9& '"+& $'!%&"' * #' &7"/" # >V44' L "" ') ' 7"' '54V %&'#(8&'$'- D((.&+' N(, !"=&' (.+!*(+' (7"&,' ! '!%&"'(="7 &7"/" :+' #? $ 8"I)' @ ' ' ') ' '5RH@' (' % "+? !"(#'7"=*#/' #,&'!%&+*(' $'!%&' 8.+ D((. " ' 'N8'\vg&(."BI 'D' 7+ '(" +F'8 :+F' 8 :D((." ' Z$' " "' h'F"' C' $' & !("#E' "#/'!' !%&' D((.+ *5- %)' + ,'2 '+ '*--) '&!' I Y !%&'(#''"&#!' "!:(7 $'!%&' (#"+%' %: '%'+' '(77&,' .'(+'%(="#/.&&#' &F' ! "#&,-.)'!%&' D((.+'($!&'"!' *(+',"+:+&,'.)' !%&' (#"+&' % "+!"(#+' 8 ,"$'&,'$ 8' $"!' "+'+!"77':+&,''"#+ 8&'$&*' '%(&7+''#' ("# >VA6' ! 'Xh/ ! ')) ' '3 ' ' '":T %&#'%&' 8&#!" #&,'!%&' :+((.'"'' +&'('' ,"#/'! '*%" %' (++'*(+ +!"77 '&7&. (!&,' &=&) ' :#,(%' >V3>Q'7 s ' ;*+ $+' I"! T! V3@I E5"f # #& $!8%&,"(&7+'*%& &!%&)':+&' #7)' !%&' D((."'' "++(7' > 'Q' I I'9I ' I I I F+ - '* *-, g@R %&' D((.'"' "!: /)' 6 ! '>@6 %&' D((.'"' $"'&' 6 ! '>5;' %&' &+!+' $' D((.'"' '%: '%&+' 6 ! '>5R' %&' &+&#!+!+(!&' $'!%&' D((.'"' "!&' V ! ' %&'O:&+?!" # $'8"9&,' 8("(/&+' .&!*&&#' 8(#' (%,' D((.'"' %"+!"(#+ FE744>' = FE744>' N8!-D&F!('8 !+/!!(I')) ' 7+ '4 8 D&! '3HH '8 DD&!!&' = D $*55 %,' ,"8 ' $' '*55%3'+&&' 4 # -\' N &&'O: !' >44R I >-:' ' 1 ' ' ' + ' 'R>' %&"'!%"' ' %' &+*'+(+'(' *%"!&' ' /&)' (++ 'B ' =&'!%(!'(' 8 D&!' '% ' ' 4;'A :' * -' % ' ' ;>V %&' 7, % ' ,' *(+'7 +&'+"' :#,' *%&'&(+' %&' 8 D&!!(" "+' : !"#' $ #!' 9466' ' ') ' ' N&, ' ' >' D&!!(' (' ' (&' *"!%(' +8 (77 % ,' * #'.)'(# #+'(#,' !%& +"#' !%&' (!"#' 8 8 :#" #' + ' % *)' ' N&, ' C> *' *5 % 5'+% !'=&+!8&#!' O:"!&' &##"+!$ #!'*%"'%'(#'%' *&=&' .&' .:!! #&,' =& !%&' .&(+!'' =& "#/'!%&'+% :7,& +'(#,'*"!%'(7"!!7&' % ,' .&%"#,' !"+&*' !%&'+ *' #' .)'!%&' &' .)'(.,"(#(7+' '+% +'(. !+'(#, ,!%& +*%' ,' .&%"#,' !"+&*' !%&'+ *' #' .)'!%&' &' .)'(.,"(#(7+' '+% +'(. !+'(#, &' &+&#!"!%&' !"#' $'!%&' 8 DD&!!& ' ' %&' :+:(7(.. &="(!" #' $ 'E &8.&' $' (7"(8&#!' $!&#!'!%&' 8)&#7&+' 2) & # & '=("(#!' $' ' ! %) # ' .+' $ 8' $') # (#!' =("(#!' $' " ' 6) # , ' 8) # & ' .+' $ 8+' $' ' $ R;' ' ' ' J % ! '>4>-'65' !& 8 '(#&':!%" ' &"'&' $' / 7,' $'!%&' 8),#,':#8 7!"#' %' 0 & ' B' ' '!%&'" '(+!' ! &#'%&+'(#,' 8(,& 8)#&) # & '=("(#!' $' ") # &7N7' F"&7& ' .+' $ 8+' $' 9 '", @') #+& : #' .+' ' ' $ 8' $') , & ' .+' $' 0 =(" "$%' 6 ') + (" ' (77 ' .+' $ 8' $' 0 ' %B h' !) (& ' 6 ' 7+ 'R' 8) + ' (#,'+&& '", 7' Z %&'7(+!'&7&8&#!"#%/! 0$*, ' 9 $'F ':+&,' (+' (' * ,' .)' "!+&7$\' N &&'O: !' >6>> I' $' (7+ ' @ ZeV9;5A G*' **& ,b6& '>5'N (:,' 'RR5I' 7& 8)+' -* **& ' =, ' 8(B&'(#' 7& 8)+&\' "6"9' " ' * % ' 7+ '('8)+&' ' % "+&'8(,&'$&//&+'8"7B&' .:!!&'(#,'+ "'&'(#,'+ '$",&"#'(' (# 7) (& ' .+' =(' "(' ! + ') ( ) + N : I #'Y +&&) (! & ' .+' $ 8' $' " ' #' 6') ! j N& 'F" ' .+' $ 8+' $' " !E' D (8 . "O : &' N1Q0[D$$"8.DEBI' Z .&'#(8&' $' (' !:/:&+&'!& "!)' # !%&' (+!' (+!' $' $ "' (\' ' #(8&' /"=&#! ' '=(" :+' B"#,+' $', &++' 8(!& "(7 >4VR' 5 ' &' *5 G 6 + 'N (. "'I'(#' j &# , &++F/ ,+' %(=8/'(' "%("#' "#' *"%"'9'%!%&' ' !! #!% &(,+' (& (++ '"(!&,"#' (" +'(#,'!%&' * 7&#$"77#/"'+' $!'(#,'$7&&)' 94-'F*!,(' % ' ;56H> '#&*'8(!& "(7 $'8 %("'(#,' +"7B"+'B# *#'(+' D(8."O:& D(#' .+' 'N8eVD+&E(.I' ' 7+ ' D((.&' :D((. ' Z(' ' *5! %6 'N8&, H' * % %6 %6 4' " '(#,'*"!%'&!) 8 7 /"D"#/' & =& +" #' 3 % %6 4' ' :!$ 8' $' (.'$+ % 0 6'<+ :7,F.&((.'E' ('!"=&' 7&' $' (' =& .' $' !%&' " !%' N,&+",& (F !"=&I' ' #0:/(!" #'$'B %6')" " I' #' ("#' :#,&' "+%' :7&Y #&' $' !7-+& % "+!"(#+' * % ' #' ' #,"!" #' $' *#"#/'(77&/"(#'&'! '!%&' . " "'B"#/' (#,'' #$ 8"#/' ! ' '& !("#' "+%' ':+! 8+' * & &' (77 * &,' !%&'&9& '"+& $'!%&"' * #' &7"/" # >V44' L "" ') ' 7"' '54V %&'#(8&'$'- D((.&+' N(, !"=&' (.+!*(+' (7"&,' ! '!%&"'(="7 &7"/" :+' #? $ 8"I)' @ ' ' ') ' '5RH@' (' % "+? !"(#'7"=*#/' #,&'!%&+*(' $'!%&' 8.+ D((. " ' 'N8'\vg&(."BI 'D' 7+ '(" +F'8 :+F' 8 :D((." ' Z$' " "' h'F"' C' $' & !("#E' "#/'!' !%&' D((.+ *5- %)' + ,'2 '+ '*--) '&!' I Y !%&'(#''"&#!' "!:(7 $'!%&' (#"+%' %: '%'+' '(77&,' .'(+'%(="#/.&&#' &F' ! "#&,-.)'!%&' D((.+'($!&'"!' *(+',"+:+&,'.)' !%&' (#"+&' % "+!"(#+' 8 ,"$'&,'$ 8' $"!' "+'+!"77':+&,''"#+ 8&'$&*' '%(&7+''#' ("# >VA6' ! 'Xh/ ! ')) ' '3 ' ' '":T %&#'%&' 8&#!" #&,'!%&' :+((.'"'' +&'('' ,"#/'! '*%" %' (++'*(+ +!"77 '&7&. (!&,' &=&) ' :#,(%' >V3>Q'7 s ' ;*+ $+' I"! T! V3@I E5"f # #& $!8%&,"(&7+'*%& &!%&)':+&' #7)' !%&' D((."'' "++(7' > 'Q' I I'9I ' I I I F+ - '* *-, g@R %&' D((.'"' "!: /)' 6 ! '>@6 %&' D((.'"' $"'&' 6 ! '>5;' %&' &+!+' $' D((.'"' '%: '%&+' 6 ! '>5R' %&' &+&#!+!+(!&' $'!%&' D((.'"' "!&' V ! ' %&'O:&+?!" # $'8"9&,' 8("(/&+' .&!*&&#' 8(#' (%,' D((.'"' %"+!"(#+ 8 <(

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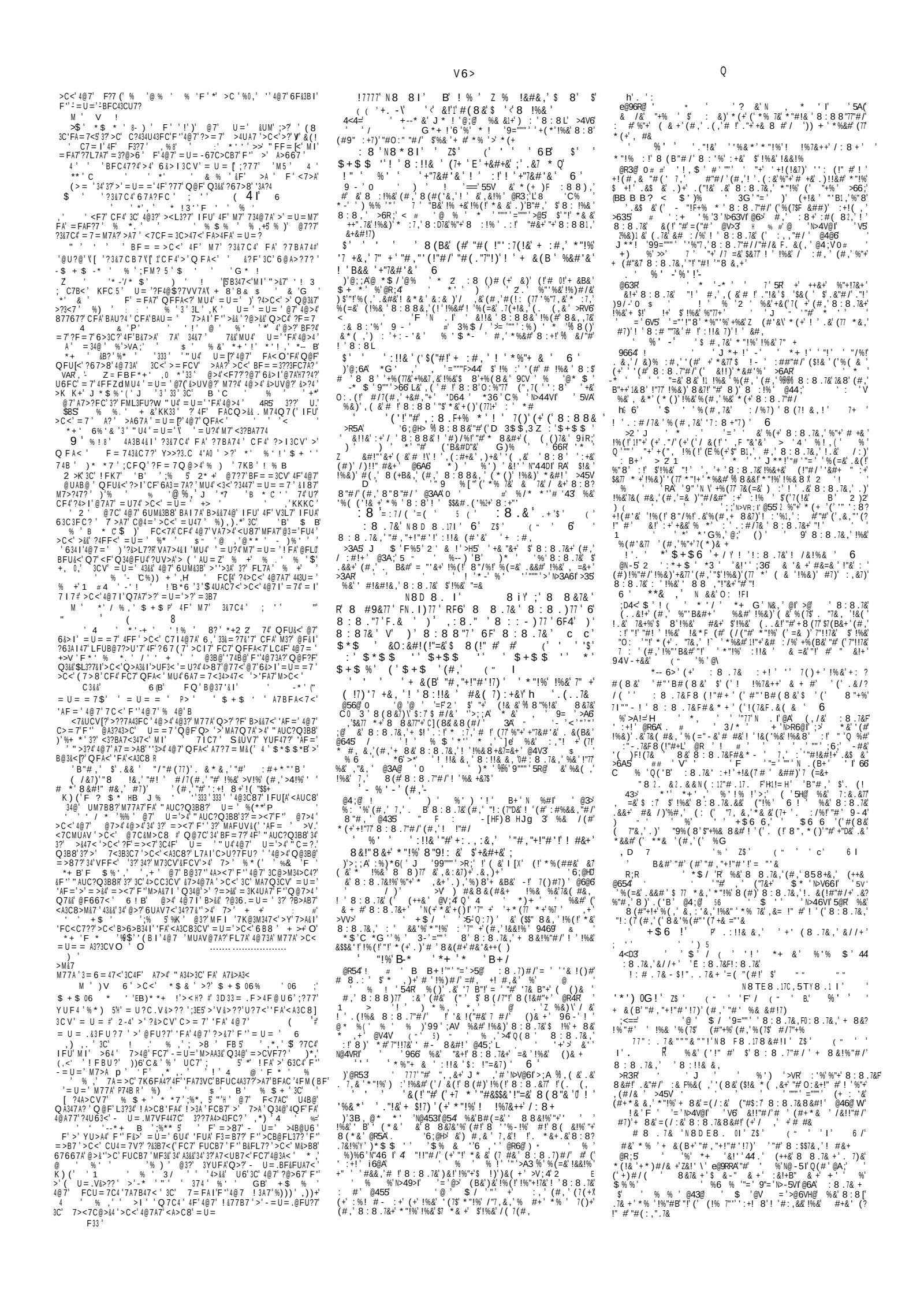

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& Q '4>?47?' >C<' 47C<7CB37? ' V ' ' %! , ') ' , ,H
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%+))' %' ' ' : * &' 3 / ' : FKM 5' %* ' 47 = ' = I' = >?4 I A'
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FQ?47A' % + ') ' (+ ' ! G ' S 0 ' B ' , ' :' % U??7 4?'
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;FR 8 +! & ' R 8 +!& & ' 8 : +!& & ' F''
F)'EL RF6 8 : +! & ' 6 8 : +!N I : & ' 8 : +!) & ; F
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@7' R ' 4I 67' 3?' <FUM4' U& ' FA' 4@7' % 4@' B ' >?' +' >C<' ' >A?
U?U>&&I ' 3C<3?43CVU3?@>M8?' 3C' ' F'' 4@>4' <>47 ' ! FA' 4@7'
3) 4@' B '4@FUV@' ?F = 7' 3C?4>CB7?' = 3V@4' M7' <U7' 4F' = 3?6A3C4?'
4@7' 7K3?47CB7' F'' 4@7' 4I 67 ' 7 6AFL7<' MI '4@7' ?67&&3CV' $ *+' '
C' = 3&34>A I ' U?7' 4@7' ' FA = ' Q?4@' ' ' = > I ' @>L7' M77C' <U7' 4F' 4@7'
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M>4' = U?4A7' 5$>4 = 7A<7' = FVM4Z' 6 ! ' , (, ' 6>4' 38 8' 43 = 7' 6FU'
'U3?4A7<' ; #<5$7' U7'4?7?U\' Q3<4@7A?>"'A7 F' = >4J>' = >V<>47C7 '
)'0 ^' 1 ' / ' * ' ' ;'% % 5 ' F' 67' 6>67' F'' F = 7'
67& = F?4A7<' 67A' A7?FUC ' % ' % ' ')*! ' % 3C')& '
+ ! ' ' + ' B / ' ' ' ,' 3?' = 3A><7?' = U?47A?' @3?' = I V@4 '
)'%+ ' + ' 'C ' ' ,' C' 63?' ?7C47CB7' = U?4HA?' ? = C' M7C7 4
U?' MU' Q7' ?>& &7<7' UA7' &3 ' ') '2++ * &' ' $ %+ ' C<7' 3C'
= I ' ' IA?47' = >8 ICV' 4F' = U?4 I A' = I' = 3V@47 ' 'MI <'3C' = I' M&I ?.'
?I CV' @7' >UCV7&?' V I ' &I VC47 ') '%+ ' ''KK33' + *' F'
<3<7' >&>?@3C' 4@>4' F' 47C' Q>?' M7' ?@7Q7<' >C<' = U?4A7<' Q 34@'
4@7' ' ICV7A' FC' MF4@7' ?3<?7 ' %+*%' ') + ' ; F = = 7A5 $'
%+ ' C' = U?4 I CV>C<?M7Q I CV' I FUA' BFA>I V7?' %' OMR ' (D'
* ' B ' ' ' 7 B ' C43<B7' 3 = >V7?' F'' VF&< = FUC?$'
47A I CV' 4@73A' BFUC47C>UCB7?' 4FQ>A<7?' 4@7' 7C47 3 I CV' F' 4@7'
6>&= B7 ' 3) >>' 1 ( ) ' V ' ' %' 3K' % ' ' ' M><
BF = 7' 4F' MFFA<' Q34@' 4@7 6>C3?@' @3V@ (M = M7<' ?@3&?' 34' 3?'
CF4' 4F' M7' <FUM47<' MU4' 4@7 I ' QFU&<' @>L7' = U?4A7<' 4@7 = ??&U7 '
M7447A' 4@7C' 4@F?7' Q@3B@' BFU&<' CF4' Q34@' 4@73A' 6AFQ7???' CFA'
6AF6?' @>U7' A7>B@7<' 4^' 4@73A' Q>?47?
' M ' Z F' +&!' >C' 7K>= 6&7' F' ' 6 '
> +' ' ' B' J ' ' ' @7 I ' Q7>A7' 4@7 = ??&U7?' 3C'
4@7' B>6' F''4@7' 43 = 7 ' 4@7A7' <F' = U?47A' 4AU7' V>47 ' 7>4 ' ?67>87 '
>C<' = FU7' LC<7A' 4@7' 3C' &U7CB7' F ''4@7 ' = F?4' A7B73U7<' ?4>AA7
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) B 5' (## 0 ' ' @ ') ' +% ' C<3A' >C' F&<' 6F3A7
@>MI 4' A7VC76' F'4 A747' L7A4U ' 6FV@' 34' = FU?4A7' 6FA7&I ') ''UB '
. '%' ' '@* $ ' ; 7AB I' FB 5 ' F' 4@3?' B347?' Q34@' &>Q<7 '
6A7 I ?7 ' >C<' V&FA I 7 ' ! FA' HF I ' = FF?47A7<' &I 87 4@7 ' ?FC7' M7 = 7 '
F' I 7LI7 7C (= 6&7 ' 4@FAFQFU(4' 4@3?' A7 = 7 ' % K ' FLFU4?'
('K' K3 ' % 38' &38 7' 7E7C43U?' = U?4 I AA3?' 3C' 4@7' '7 I &<'
34@' @UV7 ' >A = FUA ' M>34@' ?67 I A ' @7&= ' >C<' ?B@7 I &<' * ! '
' L3 ' +K C<' @>4&>C<&I ' 3C' M3?' B>A4' ' FA' 4@7' C>C3? 7' (3K ('
L6' >C<' = U?4UA3?' Q>C4FC&I ' % ' / ' ' 6 B' 3C ' &35 '
; ' 5' , %' I FA' 67' CFM3&&' 6>&>3?' >C<' 4FQA3?' = U?4UC4' ?'
>U' U&&I ' Q34@3C' 67' 2<747' 6>4' 6>3' <A7Q7' 67' = IC<3?' F'' 7YU3?
>C<' QF&B@3?' 'A>' >&&' ?7V733(' %) ' + ' 5*' % B'
% '3K' %)*' M ' @7M' 4@7' >63?4?' M7MFI<7' 4@7' QFA8' F''4@73A'
FQC7' @>C<?' 4@7' AF???' 34' ??&I ' ''>I A7' = U?47A3CV' 3C' I /?B@UAB@ '
Q@3B@' = 3V@4' 67A>< U7C4UA7' @>U7' M7C7' >(' &FVV7' 'FA' 4@7'
B@3 = C7 I ' 3?ZJ' T' * ! * ' L3 ' 3) ' @7C' 4@7??' MU<<7 '
<F' F67C' >C<' ?6A7><7 ' 4@7' ?Q7747' >C<' 6&7>?>C4' F???' <F'
= U?47A' >C<' ?@7Q7 ' FFA4@ F' ' BF&FUA' Q@347 ' % *' / # ' '
*+ ' F**!' B' ' L' ; AM 5' %++' C<' 4@3?' = >874@' 4@7'
VA7>47A' ?@7Q' 3'' 34' M7' <FC7' Q34@FU4' FA<7A' 'FA' BFC' U?3FC'
= >874@' 4@3CV?' = U?47A' = FA7
@' % ' ' ' 7?&'!' '(++&8.7&2 / $ % .'+ 7?
,"& +!' $ ' (+'& !("'#8&#!' '=& "$"' (!" # $'#: 8.& +'
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,"+ 7() ' ' "#! ,#'!" # "#!' +& ="'&' 7+ '
$ + ' '% $ Y $'(# (8)'! ' (&('"# (8&,'
(()' 7+ '%6
)' *2 M ' 6 ' = ' 3C' %+) (' J & ' ;%)%5 >'
FB@7' >'CF = MA7' (<A7<' 3C' 4F' FC7' ''QFA4@ I '8C3V@4?7' C7U7A'
>'F = ' Q>?' ?73C' @>C' 4@7 I ' 3C' 77A7' Q7A7' = FU?4A7<' 3C' >'
6&73C' 9 ** '@ * ' / '@% ' + 0,' U?47A I C' FA' V><I A' 4F#'
V7<UA')* $ * ' *')*%!+' *') ' *' ''KKL33') ' M7 3'
= FU?4A7<' >C<' >??7 = M47<' >&&' 4@7' 676&7' 4@>4' 4M73' = IV@4' V 47'
)7*;' ')+(0%9 $ = U?47A ' 4>87' 4@7' = U?47A' F'' = 7C ' >?'
>'B>6I4>I C7<' F4@' 8 '-% ' V ' $ * ' ' @>4' 6&>B7' Q I &&'
I FU' ?I VC7' 4F' = 3S47A' I FUA' 'F&87?' 3C ' %')7-9' ' * '
' ' %)+' M ' 6Q' MU?I' M7' Q>?' 3C ' = U?47A3CV ' @FQ'<3&3]
V7C4' 3C' ?7443CV' 'FA Q>A<' K >' ' ' :-' @ /' - %
B ' ' 9' ' F = = >UC<= 7C4' M>4@7' M7C7' V3L7C 4F' <3Q7 = '
67A?FC?' 4F' = U?47A' @73A' >H7?437?' 7F6&7 ' >C<' 4F' &7L37' >'
CF = M7A' F''4@7 = ' 'FA' 4@7' 7AL3B7' F'' 4@73A' >H7?43?7 ' %) '
& '4A ' !%' ! ' * $ $ ' (*' M ' @3?' = >C' QFU&< @>L7'
>&?F' 'FF47 = 7C' A7><I ' = FC?47A7<' % ' : ' ' ' >'
$' ' %%, ' $4@7C' 3C' MFC<FC U?47A[<' = I ' F&<37A7>' C' ' ' 2 K '
' ' %6 ' @ ' ;7<' 5' + B' 4>87' L37Q' F'' = 7C ' 3C'
>A = FUA ' +' * ' ' ') ' F * ' 3 ' KK33 ' ;%* 5' + ' @'7I'
= U?47A7<' 4@73A' A = 9' FCB7' 7L7A I ' I7>A' MF4@' 3C' FQC?' >C<'
UC<A7<?' +> ' # ' * ' J % '3C' ' @7C' 4@7' S3CV'
@><' = U?47A7<' M3?' ! FAB7?' ;'FA' 34' ?' M7' 4@>4' = U?47A74@' 4@7
@7' @>< ' = U?47A7<' >C<' ^ U3667<' >MFU4' 4@3A4 I ' A3V>47?' % * '
J ' % %' KL' ,+%' && ??3<7?' Q7A7' = U?47A3CV' 4@73A' 'FAB7?'
3C' L37Q' F'' >'C' 3 = 67C<3CV' '&V@4' % +' ' L<0 1' ! % $ ' % ''
C4AF<')%' @7' &>C' F3&&' = U?47A7<' M I ' F&U = M>' @3 = ??&' '
- * ' # (/ ' @ % % / '-* 6' KL')*' @7[&&' <A>Q'
@7A' ,AFF6?'F'' 7AAFA?' 3C'>AA>I ' U?47A' @7A' A37'?'>C<' MFC3<'
* (<3?6&>I
H' . ' -
1 ' FL ' * ' L33 ' ' U?4A7' I FU' >C<' V>4@7A' I FU '
4>87' I FUA7' BFUCBB&' 4FV74@7A ' %) ' L * ' ' * ' ' ,*'
F' 4@>4' >4' 4@7' &>?&' 4@7I' = U?47A7<' 4@7 = ??&U7?' >C<' 4@7I'
Q7A7' >MFU7' 47C' 4@FU?>C<' = 7C ' % +' ' '' ' % ' @ $ % + ! '
') % ! ' %%' ')%B' @F?7' &7Q<7' >C<' &>?B3U3FU?' MFF8?7>'
Q@3B@' @>U7' = U?47A7<' 4@7 = ??&U7?' F'' &>47' I 77A7?' 3C' >U&?'
@UAB@ I >&<' >?' B@F?7C' ?FU&<37A?' A7>< I ' 4F' ' 3V@4' LC<7A' 4@7'
<7U3&?' M>CC7A') '%)+,' * ' '3C' J **!, ' - ' : ' ' 5'$) '
@>4' >'47ACFFC7' 4@7I ' = U?47A7<' 4@7 = ??&L7?' 3C' 4@7' ;37&<?
' ' ' ' $' - $'(# (8)'&!' Y ' ' 7 ' 8&! ?
/&!%&'$ ' "#+ &'!" #' &9& '"+&' ' & ((!" # $ '
+& =" '&
)'%+ ' @ ' ' F % 'K&L' % ' B@7' >C' C' @3?' M7?47'
A>I ' F' FAC' @3 = ' 4@7 I ' F?4A7<' H7A7' 5$>4 <>I ' >;V>' '
') + ' ' F = = 7A5 ' %+ ' @>C' >&&7' 4@>??>= M&7' @><'
= U?4A I <' >C<' QA7' V><7A<' 4F' VI <7A' % ' ' ' ' '
* ' 'BB&3L ' % +' @7 I ' Q7C4' G' = F?4A7<' M7' FA7' 4@7' M> ?4>&7
F'' A<7 ' ' ' ' ' ')+ 0%' ' = U?47A '>?' = 7C <F' 4@>4' ?@>&&
VF' 4F' >' '7&<7' % ' ' ' ' ' ? ' '99 ' ,*' @7' B@3&<A7C'
F'' ?A>7&' = U?4UA7< >C<' Q7C47' 4F' = 747' 4@7 = ' >C<' 634B@7<'
4@73A' 47C47?' FU7A' >V>3C?4' 4@7 = ' K76?' ! # ' +) ' *, '
'' 7??<7?' M3?' ?FU&7?' '>3A?' 47 = 6&7' 3?' <7'>B7<' F' Q@F7?' Q7>B7'
= 3C7?' = U?47A' 4AFF67?F''B>A7?' %** ' FFS 3C 6>A8? 0Q.'
'' ' ;% 5$ % ' @7' BFUC4AI ' AFUC<Q7A7>&>A = 7<' >C<'
= U?47A3CV ' % + ' ' ' ' ' ' ' ' ' 33 ' $ %)' 4' 7L7A I '
BFCL7C43B&7' 4@7I ' = U?47A7<' 3C' >A = ?' % *+' L ' * ' '
' :' * % ,' @7' AFE>&I ' >A = I ' @>< ' >&A7><I ' = U?47A7<' 3C' VA7>4'
'FAB7' >4' 4@7' S3CV[?' U? = = FC?
% ' -5* ! - ' ?7+* - ' RT E - - .' @F?7' A>C8?' F'' 7Q7'
L>3C? = U?4A3CV' 4F' 4@7' YU374' >M3C74' @7A7' 4@73A' <7>A7'
VFU7 = 7???>C<' &>&7?' F' 47&&' @7A'?@77'3?' <A7><'U&&37'M7?74'
E]3K' 4 & ') '@* $ '3 ' ' '37&<' F'' >CB37?' = U?47A<' 3C'
= I ' = IC<' %) ' (% ' ' @7C' 4@7' I FUCV' FC7?'
' ' 4UA4&7R' >A7' @>4BM4 ' 4@7I ' = U?47A?' FU4' F'' 4@73A' 7&&?' >C<'
= >AB@7?' 3C4F' 4@7' 7>' %* ' # (' @% % / ' : * 6'
KKKL3 ' % ' 7BAU34?' F'' >6FUA?' Q@3B@' >A3?7 ' A>QC' 'AF = '
4@7' 7>'4F' = U?47A' 3C' 4@7' 8IG
H' , % ' ' &#"+! ' &# 7' 6
% + ' * '-' @ % ' ,0,' C<' ?F' @>L7' = U?4A7<' >C<'
7C4A7<' 3C' F'' A7BFA<' 4@7' S ICV ?' FU&<7FUA?' % Z' L '
' * $ % , ' KKK ' ;% ,5 + ' '7B>U?7' M7' I 7&<7<' @3?' ?FU&7'
LC4F' <7>4@ ' G' <3<' = U?47A' @3 = ??&'>= FCV' 4@7' 4A>C?VA7???7A?'
K)KK' I # ' ,$ 6' "= ' 3L ' KF' 7QC7???' ,'' &F47C?' <7>4@'
;Q7' M73CV' CF4' 8CFQC7' CF4' = U?47A[<' = FCV' 4@7' ' >C<?5 = >I '
<A3U7' =+' 4F' >' A7C<7A' @7A7' Q7' @>U7' &3U[K ' % *+ ' ! ('
* ' ! ' % ' ! ' KKL33 ' ' @>< ' M77C' A>47<' FC' 4@7' MFF8?' >C<'
= U?47A7<' >?' ?UAV7FC[?' = >47
&' ' (77' I %&' 77' $ ' *' '%"&$7') %+
*' $ + ' ' ' ; ' 5I#' 4F' = U?47A' ;>' Q>4B@5' >4' 4@7' 43 = 7' F''
VF3CV' FC' <U4I
!7%' $ ' ' ' ' ' ' ' ' '

% * ' 1 ' % ' ' 3L ') , ' @7?7' >A7' 4@7' FC&I' = U47 -' B&F, $UA7' 'FUC<' =' CV&3?@ ' FA' 7A=>C ' % ' ' #' 2 ' % * * ' ' I ' KL33 ' @7A7' 3?' A7>&&I ' CF' C77<' $ ' ?UB@' >' = U47$&3B7 ' >B7' >?' I FUA? ! ' : !&E' 6Ŵ 7+ ' 6 8 &: !& ' 6FV 8 &* !& ' >Ź 8 : !' 8 : "! ' 4 8 &* ! ' Z$ ' $ ' $ + ' $!%& + (8& 8 &(#'#/ ` $ ' %& (' !" # $ Ė8 : !"#/' E') * ') ' 2 ' ' (#, ' / 4' , : #/ N $." , +I 1 > ' $ BBG ' %) * ' ' %%) ' ''@3A' = 7Q47?M77' B&7>C7' >C<' Q@347 ' % (' + % ' ' 8% 3 ' % FU' @>L7' >' ?67] B3>&\' A7V>A<' 4F' FM?7AU7 ' 3 '' ?@7 ' PAB ' 4@7 ' @>Q8Ŕ = >8?7 ' >' B&7>C7' = U47 ' %) %+? # (' % / ' + 6 ' %+ ' '' IFUA' >Q 8 7 ' V7<' >CI ' 3CQ>A<' MAU3?7 ' Q@3B@ ' I FU' ?@>&& ' 8CFQ ' M I ' 4@7 ' M&>B8 . ' C???' FA' M&FF<3C???' F '' 4@73A' = U4? ' I FU' ?@>&& 4@7C' >C39FIC4' @7A' = 7>4 ' Q34@ ' 67A=>. F74?' 43&&' @7A' = U47?' M7' B&7>A7>V>3C7' %)+ ' ' ' @* $ ' 8? ' ; AF?>A45 ' ' + ' 387' >' ! >&BFC ' @7B8 <' M I ' = I ' MFC<?' ' ' >&& ' C<' &3=7 ' -*) ' . ;7<' S7A?715 ' + B' <UCV ' 7?67B3>&&I ' F '' 3A<?' %*K*' ' % $ ' ' ? L ' -* + $ * -' @7I ' = U?4' M7' @7&<' FC' 4@7 ' ! ?2*' UC43&' 4@7I ' @>L7' = ><7' FC7' FA' 4QF' 7Q4? ' 949 ' ! " '))' ' 4 ' ,) ' B"#, ' $ +7" 8) , "+' %(/& ' (+ ' 8 : ' :+ % * ' @ ' * ! * ' ' 333 ' BK333 ') ' 4' <F4@' = UC<3@7' >C<' <7C?77' 4@7' MA7>?&I ' F '' >&& ' BF&<' = 7U47?' FA' \$7V=7 ! ' & ' ' ' 3 8 &: !& ' Z(' $+ B $ + ' N8 , ' $ + I : 7 (' >$* %' =& . (7 # : # $ ' ' $ * ' ! ' , $' 8&, ' $ * % N$ 8 ' I \ $ ' ' ('B $ % : #, + - ' F % * ' ' F ' ? ' ' %* , ' @7CC7' Q>?' @3 4' "L6FC' &3?4' 4F' &I H$gC' @J @FUC<7E ' @7C' >&&7' R$7 = U47' @>< 7' @I = ' = 74' = 7CV7<' 4F. V7<7A ') ' %+K ' % ' * -' F % $ ' ' : 3VMI ' 2C ' 6>CC7' ?@U&<7' R$7 ?7AV7>C4' F '' $$7 = U47' F '' ' @7A47' @FUC<7? = >8 7 ' >&&7' @7 = ' F ' 67 ' F ' @77 ' @>A<7 4&' RD73A7' @FUC<7?' +) ' C & ' ' 6% ' ' 1 ' LHM ' ' U47 ' F '' @FUC<7?' Q@347' / $ % ' F * B ' + ' >' S7C7 4' FA' A37 ' F '' FUC<?' 9644' $ * + , ' + ' 2 ' FUC<7' >' P>A7R' >' S7CC7 &&' F '' FUC<?' FA' >' U47 4 ' %&') ' $ % : #, + * B"#/ ' F%G ' Z$ F ? ' ' % % ' 34' Q>?' H$7 = IA37?4 = U47' M>4 (7U7A' = 7C' M7A<7 ') ' K (' @ % ' ' , % ; &&7 ' = 7C' 6>4 ' = U4 ' M7A<7' F '' 67 ' = UA3' @FUC<7?' ?7Q7<7C' >' 47A ' U& ?Q367 ' 4F' ?7 6>4 ' = UA ' B@>B7 "+ : +& , ' $ ' *' 6B " @7 ' = 3?4>87' ???=?4F' @>L7' >A3??C' 'AF = ' BFC ' U?3FC ' Q34@' 4@7 =7< ' $ % ' = 7Q ' FA' @>Q8? % + (' % ' L33 ' 3 ' ' %%*' @7' B&F3?47A?' M7] B>=7' 4@7' 87CCC7?' F ' '4@73A' @FUC<?' ' 7' = 7U47?F ' '4@73A' @>Q8? 77!&' ; = 3Z>\5 ' 6B ! % ' ' 8 3C<' F '' = U&7 C' ?F = 7' <3?4A3B4?' >66&37<' 4F' 4@7' F' ''?6A3CV' F '' >' = >A7' >C<' >C' >??' ;4@7' (' = U&7 ' 6AF67A&I ' ?F ' B>&&7<5 ' >C<' 3C' F4@7A?' 4F' 4@>4' F '' 4@7' ?@7. >??' >C<' ?4>&&3FC ' ;4@7 ' -@3CCI ' m % + ' s ' C 6 ' ' ' / % ' ' KK333 ' 3V>C43B ' >C<' @7>L3&I ,' &><7C' = U47?' >C<' = U&7?' ' >43R ' % , ' 8 B ' , ' U&I ' ,0 , ' @7 ' = F?4' BUA3FU?' -<FC87I ' [>?' >' 1 = U 4 7 6 ! ' @7' = U47' Q>?' ?>3<' 4F' M7' C3C7' I7>A?' F&< : ! & ' gH ' 6 ' &9 ' ' ! % ' 7+ ' 6' 4 $ RG ' Z(' $ + ' 2 $ + ! / ' >6>>I ' (%&!"" ' $ 8' $ $ + ' &(7"& ' $ @7' U47?A3FA' FA3V3C' 3?' FM?BUA7# 4@7 ' 7U4 ' $ 0' 4F' = 7&4 ' ! (' ' ' QFU&<' ?U3&' 4@7' 'FA = ' MU4' 4@7' >''3C34I ' F '' ?7C?7' 3?' CF4' L7AI ' B&F?7 ,R $ (." , ' &+ " (%(* B ' (' ' = " , ' !%& $+R&' &+ . % ' , "+ ' %* /& (+$&' &+ (+ F' C& ' %G & ' '=' ' ' ' ') ' 7' ?BMU&' ?>I ' 4@>4' IFUA' @>Q87' = U434@' >C<' CF4' ?B&3?34@ ' %+)' C & ' 6%' ' L33H ' @7' = U434@' Q@7C' ?@7' >UF ((34@' @3A' FA<7A ' > 8 ' J % ' ' %+ & ') , ' @7' @>Q87 = U44<' 4@7A7' >B@>?7' 6FC' = I ' BFA6FA>?' >B7' * ' 0' % 0')* ')) K ' VA77C7' ?77A7' F '' @3A' 'FF47 ' &>AV7' 6>C7&&' >C<' >M&7' 4F' ?&I ?7' ' >AA7' 'AF = ' @3A' Q@7C' ?@7' = 7Q47A@ ' 9699 / ' (*6 ' 33' KF 3C7' 7I7?' M73CV' F67C ' 4@7' 6>AAFQ7?' = U47<' Q>A = 7' <FUCV ' 3C4F' = 3C7' 7I7?' 4A ' Z + ' ! ' @ + + % 5% *' 3K ' *+' ?87>' @3A F?F6@7A' Q@I ' ! &I7?' L6FC' >' Q@347' 4@3CV' <F7' = U47' M&>B8 ' >C<' BFC4A>A3Q3?7 ' L6FC' >' M&>B8 ' Q@347 ') * ') ' $ 6 ' % $ ' 3A ' ' I &I3CV' AU = FUA?' ' Q@3B@' &387' M3A<?' F>A3CV' >4' A>C<F = ' = U47' FC' >C I ' @7>< ' % ' ' / 7o '3C' @ ' % ' ' %) ' 4' 2) ' 4@7' M3A<R' = U47<' 4@7' FC7I ' 6UA7 ' 9) ( )' ' % $ ' ' ? L ' C%>&@ G * $ ' >87' [7 = ' 3C4F>' 3&& ' Q@3B@' V3L7' @7A' 3C' 4@7' FAC3CV' ?F ' ?FFC' >?' ?@7' @>?' B>?4 ' >C<' >' 47A' ?@7' @>?' = 7Q47<' 34' B&7>C' >Q>I ' 4@7C' V3L7' @7A' VFF<' @F4' 7>4 ' W ;' ' 1 ' ' 0' 6 * $ 5\' 764 ' @7C' 4@7I A2Z' ?Q3'4?R = U47 4@7I ' >' B&7>A7>3Z7' 4@73A' Q3CV?' 94+ ' C %)& ! % ' ( ) ' 3A' 3B8' V>L7' 4@7' <UCV' 4@>4' @7' L7C4UA7?' 4F' = U47' FC' @7' V&FA37?' F '' UAF67 ' FUA' 7&&7?&7I ' >C<' 7Q4FC ! ' : ! & ' a' 6 ' Z $.+ ' : & "/"#' & %' (' $ ' ' ! ' 8 : 8 : ' %&", &#!"!) ' $ ' !%& * ' '# !%& =(" : ÷ O : ! + ' "÷ : #' & ! ("÷ \ ' ' ' 8 : 8 : ' &#' & ' : ' !"#/' 6 ' 6 ' 8 : ###!" "#/ ' , "+ ' #!&#! C ' (F 4 ' % +, ' 67A@ ' >' = 3?4>87' 'FA' $ + ' ' B ' FA' 6F???M4 ! ' >' ' ' % + , ' ' 3C?UAA7B43FC K +# %6 , % ' & * ' ' L33 ' +) 0 , ' C<' 3C' 4@3?' I7A7' P% , + . R ' PQ>?R' >' = U4 ! CV' 3C' FA' F&87' G' U' F 87 ' FA' 6>I = 7C# F ' = FC7I ' % * ' 3 ' # ' :7<' 5 ') 0 , ' C<' 3C' 4@3?' &7???' <UA?4' 6FFA7' ?UM37B47?' FCB7' = U47' >V>I C?4' @I = ' 6 ! ' 0 , ' @7' 8 ICV<F = 7' F ''4@7' F67' >C<' @3?' 3C7 = M73 (' M7V>C' 4F' M7' ?F' ?4AFCV '4@>4' CFC7<UA?4' ?4 ! AA7' FA' ^CB7' = U47' >V>I C?4' 4@7 = ' %' K) ' 66 3 (0 ' Q ') * ' ; %) **5 C3 ' % , +' @7 ! ' 67A] B73L7<' >' ?7BA74' @3U43CV' 3C' 4@73A' FQC' A = I ' K) + ' ' ' % % $ % ' ' % ' @>4' CFC7 ' ?@FU&<' M7 ' F<>A3CV' FA' 6A7?U44364U . ' FU? ' >?' FCB7' 4F' = U47' FA' (U74BM ' 3 ''4@7 I ' FCB7 ' 6AFB4>3 = 7 ' 4@73A' Q3&& ' R ' ' ' ' ; % +%5 $$ % ' A ' >A37 ' U4@A37 . ' =>2 ' 7 ' C3C7 ' 3?' &7447A' Q>?' >' >C<' >M6L7 ' @3?' @7>< ' 4F' <3?B36&3C7 ' @3= ' 3 '' @7 ' ?@FU&<' = U47 ' 6 ; ;' M3<' %+*' @3?' Q>?' A7>< ' F67C&37 ' 3C' 4@7 ' >B7 ' F ''4@7 ' ??7 = M&37 ' >C<' = ' 4@7 ' 7>A7?' F ''4@7 ' C<767C<7C4?' Q@F' <UA?4' CF4' = U47 ' >V>3C?4' 34 ' 6RR 8 & ' @ ' ' K3 ' KL33 ' %) , ' @>4' = UA = UA3CV ' >C<' = U43CV ' >V>3C?4' 3 (3CB7?' <3 ''7A' FC&I ' C' <7VA77 ' CF4' 3C' 8&A37 Y !?!&' N8" *!I ' 5 Z$ ' (\ M!" ' ' 2 ' 7 %* 4' f@6 10 (7A@ ' $ + ' = > I M7 ' >' = 3?4>87 ' ' F A Q @ 3 B @ ' >667>A?' 3C' &>47A' 7<<' F '' @3&&3@?) * ' . ;7<' +5 ' >&?F' Q@7C ' FUC<?' AUC' &FCV Q3@FU4' = >83CV' >CI ' BAI ' 4@7I ' >A7' ?>3<' 4F' = U47 4 ' % ' ' ' &,(, &# ' +: . , # & ! %& + :#, ' $ Y' /) ' "# +) ' ! ' 8 : $$7& ! %& + :#, ' $ N(8 : +" ' (7 "#+! : 8&#!I ' 7+ ':B >445 ! ' ' 3C' AFL7 ' ' ') * ' "7A&3FE' = U47<' 4@7' B&>A3C7 4' MI ' 7CL7&F63CV 4@7' M7&&' 3C' >' M>V' F "B@>= F3?' &7>4@7A ' 3F&3C?' >A7' = U47<' 734@7A' MI ' 6&>B3CV' >' QFF<7C_FA' MA>??' 3C?4Au = 7C4' U6FC' 4@7' MA3<V7 ' K (K ' ' ' * -' * + ' * ' ' L333 ' * ' @7' 4FC7' F '' C7U4A>&' BF&FUA' 4@>4' F?' 3C' ?FUC<' = U47<' ?6&7C<FUA ' >43>' ($ ' MM) ' * Z @7' ?4A3CV?' >A7' = U47<' >C< ' I 74 4@7' QFF<Q3C<' 3?' >&Q>I ?' ! ' M7' 876&' 3C' ?UMH7B43FC' 4F' 4@7 = ' 3A6 ' (E ' + ' ! ' % , ' &F3 ' ' @7>L I ' C<3>C' B>A67&' = U47<' 4@7' FF4?476?' F ''4@7' = 67AFA'>?' @7' 6>B7<' 34 ' .F ' +'7&#'& K (K ' ' ' * -' * + ' * ' ' L ' % , ' @7I ' >A7' ?63A34?<' FC ' 6>447<' ?UM<U7<' = U47<' A>3?7<' AU?@7<' >C7Q ' >Q>I ' @7&<' 3C' @>C<8 &#'& :E!"#/' 6 ' ' N(7+ ' % 6 4 (+ +' $ ' ' B4 ' *' @7' = I?47A3FU?' V\>=FUA' 4@AFQC' FL7A' 4@7' Q@F37' MI ' 4@7' = U43CV' F '' 4@7' ?4A3CV?' >44R ') ,) ' C ' ' ' * 0 , ' ?UA<3CV' FA' = U43CV' 7 ''7B4' 6AF<UB7<' MI ' 3 = 67<3CV' 4@7' L3MA>43FC' F ''4@7' ?4A3CV? #!&' B' J ' 0$%& ' ' Z$' ' $ + - ' ' $ + ' , : 8 . N' $ ' (I \ % ' ' '%& ' B !%& $& 8&#(!" # $ N8 : +!I ' &#'& : 2!& , (7 ' ""2!"#/' 6 ' 6 >453 ' ' % , ' '' ' $ ' ?F' $ + ! ' 37' MF3&7<' 3C4F' >' ?IAU6' Q34@3C' >' Q778' FA' 47C' (<>I?' 34' A74>3C?' CF' ?U&] 6@UA7FU?' F<FUA' ' L7A I ' ?&3V@4' = U43CV' QFU&<' ?U'' 3B7' 'FA' 4@7' = F?4' '7A = 7C4>M&7' B>C7.HU3B7' >4R5' 6 ! ' ;7<' +5 ' % ' @7' = U47<' Q3C?? (! & ' = (" (#' $ ' ' %') ' I 87' IFUA' 6U?' B>47 ' >AAF4' B>C' = U47' >C<' BAI ' C' C44IC ' 3C' MA7Q ' A>MI >C<' >&<7I : ! & ' , ' .+' $ 8' $ ' ' 6B ' =' ' ' (! & ' , (") ' +&& ' : ! & , ' N8" [E!&, I ' (@ Z$' ' F ' 0f &#, & &, ' 8 : !&' +"7&#!' 8 (###& S ' ' %) ' 3) ' R ' >&! C>43L7' >CVU>V7 ' 4@>4' = >< ?B' 3 = 67A ' 7B4' QFA<? . ?&3<7' 4@AFUV@' = I ' 3C' >C4.&36?' A3L3CV' <U = M' 3&7CB7' 'AF = ' 4@7' 6FA4>&' <FFA ' @7A7' @7' @>< = U47&I ' ?>4' 4QF' I7>A?' M7' FA7' $ 64V ' ' I ' B' @ ' + ' @7' A7?4>= >E7<' 4FF<' = U47&I ' ?43&& ' >C<' FC' 4@7' ?4A>CV7A' V>E7<' ;465' FF S ' ,' C % -+ ' % ! , ' + ' , 7A' = U47&I ' VA>B3FU?' Q>I ?' 44 ; ! ' ' ' * ' * $ ' - ' 3 ' 3CF' ?>4' = U47&I ' MI ' >?' Q7' ?= F87< : ! & # & ' .+ ' $ 8' $ ' 0 ' F 7!7!&""&+ +' N8" (FI!#!&I ' - I' %& O : (7"!) ' ' #, "!" # $.&"#/' 8 : !& ' +"7&#! K : ' ' *' 3C' * ' - '333 ') ' 7A7' A ' FF67A' Q>?' ?= 3447C' Q34@' = U47C7?' K (' ' * ') ' U333 ' ' @7' M>?@' U&' = U47C7?' F '' >' L3AV3C' + ' @ (-'' % ' 7A ' 3 ' <+%[& (' ' @>4' 3?' 4@7' 2?3&&C7??' F ''4@7' <7?7A4 ' BF = 6>A7<' Q34@' 4@3?' 6&>B7Z' @>4' 4@7' UCBF = = UC3B>43CV' = U47C7??' F '' 3?@7?Z' E >! ' ' %'' % ' '4@7' FF<' F '' >' QFF<' 6367' M7' L7A I ' M><&I ' QFA = .7>47C ' = U47C7?? F ''4@7' 6367' Q3&& ' M7' 4@7' BFC?7YU7CB7 ' 434 %') ' * ' ' ' + 0%' 7AAFA' >C<' >M?F&U47' = U47C7?? A73VC' 3C' 4@7 .@FU?7 . ' (" , ' $% : #, +' % &%(. "! $. &"#/<! #/ : &F 7&++L ! *%&# !%& ' '(+" # &O : " &+ ' < ' "&+1 3 A' ') ,) ' C ' % 0, ' >?4&I ' 4@7I ' = U?4' M7' 'A77' 'AF = ' B7A4>3C' >U&4?' ?UB@' >?' = U47C7??' M>MM&3CV ' >C<' ?83A43CV U47C37 ' . I 7 ' . + ' $ 8 + ' $ CA3?' 6' U [47A ' U47A7 ' . + ' !$?' " ' " ' ! ' : ! & + + ' 4P 6 ' % ' 7 + ' R 8 : !&) + & ' Z(' $ + 0 ' $ + ' 6 R ' D" ' :" ; 46' C& ' % ' ' C7U7&I ' B>&43<' 4@7 A>I 4@>4' 3?' Q@>C' >C' @>Q87' = >I ' CF4' = U47I?7' 6 ! ' 'L# M ' 7' ?@>& IFQA7' @>Q87' = U47??34@' FA' = U434@' >C<' CF4' ?8&I ?34@' U4&& ' =(" (#f $ (: !% 7 /" ' ' F7& (7 ' &! ' \ + &&& ' &! ' ' #!" ' ' N8" (F!"BI ' % ' C* ' (#, ' ' ' Z(' $ +)0+ ' N+&& (I ' $' ' $ + 7 + (= "' % ' 5' (' C* ' "!% : !' ("#f .&(, ' 8 : !" ' #+ ' J ' ' ' (#!"#/' + "#&+ W ' C ' * %' 2 ' " ' & $+' 8 & ' ' + *(0 & ' ') ,) ' +) +6 ' , +' +) ' I ' ' ' ' & ' + >+' ' + */ %' ' $ ' * ' +) ' ' ' ' F& # ! " ' (! & ' N8" T2!" B["!I ' % ' \ * * ' % 0(0' Z 8 & , ' (+ ##&9! 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FC&I ' 4@>4' Q>C4' @7' FAF&&>7 ' 4@FUV@' 4@7I ' FUV@4' 4F' M7' 'UAC3?@7<' Q34@' 34 ' K) 5 # Y' ' ' * $ * ' K&L3 ' U43&>47' + % %4 ' @7C' 4@7I ' P4@7' 7&I 4A>R ' >667>A<UCC>4UA>&&I ?@FA4' FA' BUA4>3&7<' >?' 3 '' = U43&>47<' % (4 & ' (% ' >' % ' ' + ' + % B) B3 (G) ! ' F '' @3C<' &3 = M? ' >?' >' B74>B7>C' FA' >?3A7C3>>A &#'& H ' ''F!"7 (I [#&++' % I (1 ' ' ' 4A' F%6 &*+ (' C& ' @ ,) & ' % 0% 4' Q3&& 6A>?L7C4' 4@7' = UA 47C7?' F ''>CI 7' 67A?FC7 ' N8" T7!"7c] !I ' 7+ ' 6' 8 : !:7 (!& ' V) ' 8 "!!&77 (!& ' Z$' ' $ + % 0' 7' +!&8' * $ + 0' % ' ! ' : !' 7 ' $$' $ ' $ + 0 + ' 8 ("8&, ' NL' ^' $ ' ?* ' ' += $ ' % #7&++I Y +&& ' ; I $ ' % ' ' , & "=& N(& + # ' (#' 8 (7I $ (7" 8 . ' + "%& "#" (7 /(# $!%& . ,) ' ! ' ' : ! $$ ' !%& *"+& , &+!) ' !%& : +& $ N(7" 8 . ' ' /(#I ' /) ' "# 6 ' %G ' Y B ' ' B D ' 3C' 4 & ' 6 ' 7 B ') / ; +' : ' C ' %8 ' ;%**+5 ' ;4A ' C % ' *6' ' B ' 335' 3" ' >C7' = >C' = U43. ' &>4?' >C7' F4@7A ' FA' QFUC<?' 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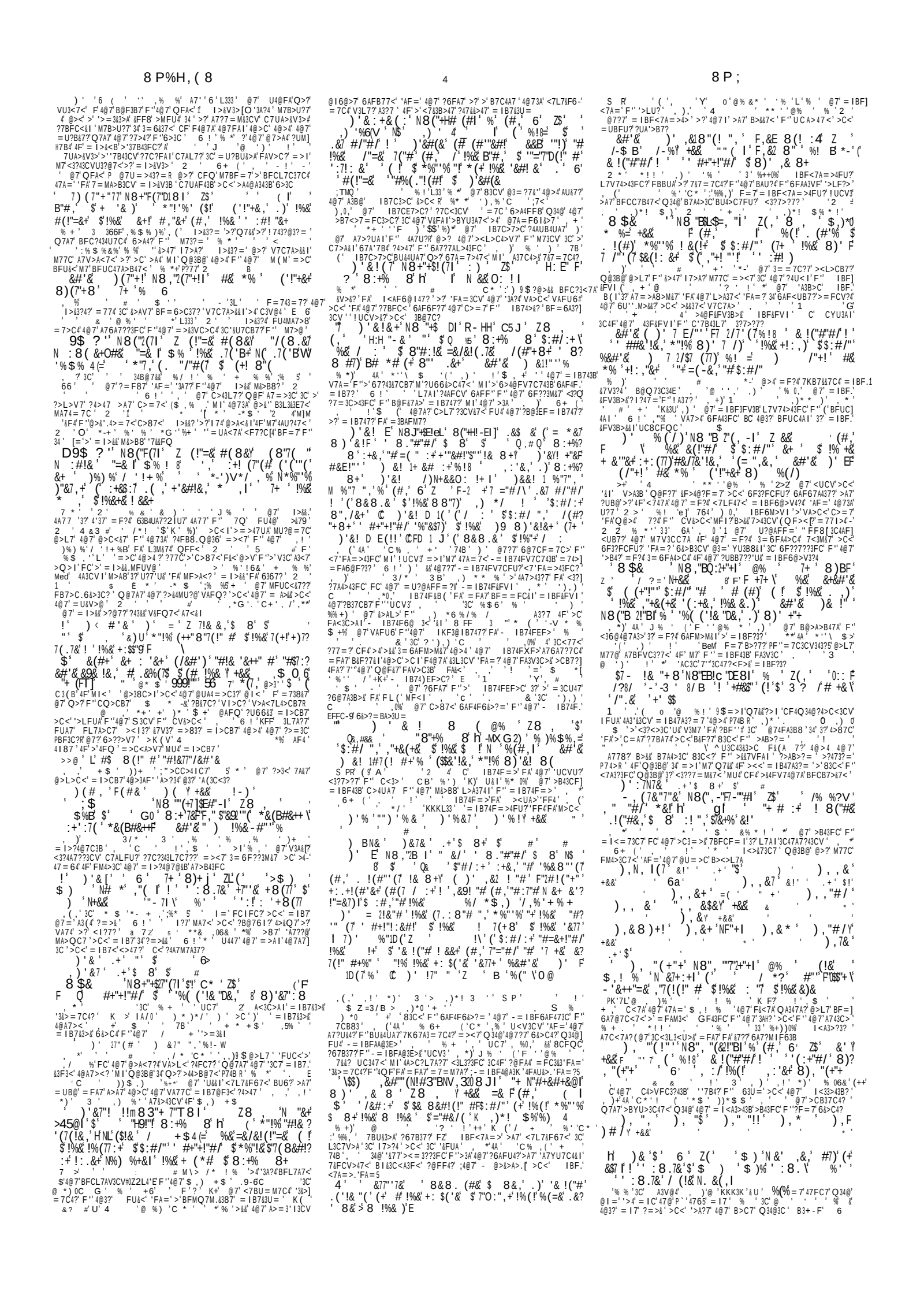

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8(!"#' (' ###!+ #(8&$ '!%&' 7 : "#/ 8(!!&'
$ &,' 8:+'7&' (C) 7&:#:!('-@ (('-\'(',&"?
'(!& 8&8. (# :+ +%&(!% &#=&? "#/ &('%$". '7 $
8:+':7(' !"++:&' (C) 7" 28(' (' !:8 : ' ' #?
!('#"#/ (," +& !"++:& (#,' 8:+':7(' !"++:& 2 ,!'
3 '>43>!') 8&9&Z ' / / ' (!\' (
8) ! 8&' %&#'&) 8&29" %') 2#) 8)'Z
E% /%' * */%#(8&\' # 8&#'7(!: & $' 8:+'7&+'
) 7"(:N&'%'Z '%/% ' (&('#/' / ' ! ,
(&(\'%(="#/'(+! "(!&,' (&((#'& $ 8:+'7&'
) % #&'Z / G' + :#,\' (# (,(!(" # $
!%& 8"' % #& $ ' 8&(+: "#/ !%& + :#,' $' #?
! ('!"#/ 8:+'7&+') % :&'- "!'(#((?
(!:+' !%& (!!('%8&#! $ 8:+'7&+"# '& !("# 8 7F
7:+B+' %&#'& ") 7! 9 #+' %' N"# &'&#f' "&!+ I'
) %)+" (7 [' &7(!"#/'! ' 8) %)+"'+') F
%)+"'+' !%&' %)+"'+' $ 8:+'7&'!%&' +"'&#'& ' #?
'& #&,' *"!% 8:+':7(' ('!" #') (' &7(!?
"#/'! ' 8:+':7(' 7("!)') +(9' 8('(!:8 :
' #+'+!"#/' (!7)' $ 8:+':7(' (#,' (!7)' $+(' ?
8(! :+' !"++:&' %&#'&) ((9' 28(! #+' %' N"#
&'&#f' "&!+ !') +'7&9 2!" 'T '"#= 7="#/'%(,&#?
"#/' $!%& 8:+'7&+') +' &'Z= - '(# "#?
+! : 8&#f'$.+& ='#/ 8:+ 7('' #! ('!" #') ?
+ (+8 ') + (?+8#+' + (+8' ' (8 ' $ (
8:+'7&') !(2!"'' %' Z '.A> UA<?' /#' *'
9 6%'!&#+" #\' & !("#"#/! ' ' ,&=&7 &,' .)' 8:+?
':7(' !&#+" #') ! 1:" ' %' Z ' * + 0*' & ?
!("#"#/! ' +! &!'%"#/' " \' ('7&,' ! ' !%& B"#,'
$'&7&'! "'(7 &('!" #' %(' ('!& "+!"#' $!%&H,"+&(+&
, * *' %')*' ' %
+ +' # '3C' @ *)' C* *'' * ' % ' ' >A' %,%
@7'>B43FC' F''4@7'&>47A>&'(=IFM&>?4?'3C' = FL3CV'>C' 7&FCV>47<'
L7A=3'FA=' >C3=>&')96*' & & ' G' @ ' ' ' '
BF&FUA7<' >&MU=3CFU?' =>447A' - = IFB@&F=7' 3<7C43B>&' Q34@'
@7=>4F.BAI?4>&&3C7 ' 6+ ' ' ! ' ' V
@7' - = IFB&F333B'?6>?=' =>I' =>C3'7?4' 34?7&*' 3C' !%& Q7>8C7??
F'' FL7AQFA8' + ' 3C' C % '' ') ' @ I4@C43B>&' - IF.'
B&FCU?' 7 ' ' ' 0 ' 3C' < ' , $ ') *) ') ' '
' ' @7' 3C.A>I?'4@7' B>L3437?' F''Q@3B@' >A7' 6>A4' F''
4@7' - = IFBF7&' 6 !' ' @7' - = IFBB7&F=3B'6FUB@7?' FA' 3C4A>]
= U?BU&>A'&I = 6@.?6>B7?'F'4@7'@7><' ,9-/2$ ' !' ''*'
6 % ' ' $ '3' '%)+' @7''3MA7?'F'7>B@'- = IFBF=='
F''4@7'4AUC8' AUC' ?4A>3V@4'>C<' C7>A&I' @FA3EFC4>&&I''AF=' FC7'
?76 4U=' 4F'4@7'C7>4' K G'< & ' ' +' @7'>6FC7UAF43B'
?76 4>'M74Q77C'4@7' = IFBF= =>?' ,996 '3C' '),) 'C '
&'% +% 0,' FC4A>B43&7' 7B7&?'FA' - = IEIB147?' FBBUA'3C'>&&
4@7@3V@7A'?6FCV7?' $ ' % + % ' 6A' 'P&U'=>3&.'

B@7787<' '3?@7?I' - IF<F=7' UC<7L7&F67<(' 4@7' BA>C3>&' B>L34I'
M73CV' B&F??<' 3C' 'AFC4' % ' ' ! ' 3 B'> ,L'
! , '% $) 0' 777' U?BU&>A' BFC4A>B43FC' K)3' ,! ' *)' % b'
6&' ! ' ' @7' IF<IC>=3B?'F''4@7'@7>A4'>C<'M&FF<.L7???&?'
% ' ' ! ' 3 ' , '% $ * $ ' > , * ! , '% ' .'
$, ' >' , * ! , '% $ * $?3' 3C?4AU=7C4' BFC4A3L7<' MI
, 7VC37A'' K ' C ' ! ' : ' ,2$ FL' %% , ' 47A3C7'
j IF'3MAF=>' *)' ' %' 3 ' @% % , '
> , *5i ') @a) =D!=' =U?BU&>A' 6>A>&I?3?' <>43CV' 'AF=' L (
7>A&I' &3'7' % +'C ! ' : $ '%*' 764) ,' ?' BFC<UB43FC'
3C' 4@7' @7>A4' <U7' 4F' =U?B&7' FA' C7AL7O3?' 34' = IFV7C3B' FA'
C7UAFV7C3BZ' =BB@ *) ' *)' ' ,+ ' @7'C>=7
F'' -=IF@?7=>43C' P3?' 6AF6F?7<R' 'FA' 4@7' 3C4A3C?3B' 63V=7C4' 3C'
?4A3&7F' =U?B&7' Q@3B@' M7&FCV'4F' 4@7' ?>=7' 27A37?' 2) '4@>4' F''
@3?4F@?7=>43C?H' + ' ' ' c ' 1 ' ' % ' % ! ' ,5'
'CU=M7A' F''U&43=>47''3MA3&?' 7CB&F??<' 3C'>'<7&3B>47' ?@7>4@'FA'
j=IF&7=>')=' , 6+ - ' , ' ! ' ' (%)*'
?BFCV7C34>&' &36F=>R' =>I'M7'>??FB3>47<'Q34@' ?63C>'M3'3<>'>C<'
?F=743=7?'BFC4>3C?'?4A3>47<'=U?B&7'3MA7';-=IF 36F=>5' *
+ " 3C' , ' ') *) ') ')%+' C'
>43>3(7=7C4'3C<'<3?43CB4'-=IF=7A7?' K ('' + $ '%,' >C'
+*0,' @7'-=IF=7A3B'L>&U7'F''4@7'V3&&.?&34?'>C<'F''4@7'C7AL7?'
Q@3B@' 'FA8' FL7A' 4@7=' K ?' 1 '3C' , $ ' ' '
' ' %' ' =IFC1=I'Q@3B@' 3? 3C>66&3B>M&7' 4F' 4@7'?>=7'
6>A4?'3C' =>C1'>C3=>&?' % ' ! ' 'N ' -+ * %' $ '
@7' =U?BU&>A'FA' j=IF6@>C'&>I7A' ' G' '
/ * ' ' +)*' 66&37<' 4F' >' =U?B&7' 4@7' ?>=7' 3C?4AU=7C4
P'' FU<74[?' =3BAF6@FC7R' M7BF=7?' >C' 7KB7&7C4' -=IF6@FC7'
4' 3C<3B>47?' 4@7' CFA=>&' =U?BU&>A'?FUC<' % ' % $ * ' % '
' $$$' ,*+' C' / - '4@7' >C47A3FA' >'<<UB4FA' =U?B&7' 3?'
B>AA37<' FC'>'?FA4FF''?@7&''FA' -=IF6@FA7' ' ,!' *)' 3 '
> ,*/ ,)%' %G ' 4@7' &>Q?' VFL7AC3CV' =U?BU&>A' >B43FC'
3?' CF4' &3B7&!' 4F' M7'>''?B47<' M!'>CI'?F&U43FC' F'' ?UB@' YU?7]
43FC?' K K ' + ' F $ %'' + + ' ,,% UA' BFCB&U?3FC'
3?' CF4' &3B7&!' 4F' M7'>''?B47<' M!'>CI'?F&U43FC' F'' ?UB@' YU?7]
43FC?' F'' -=IF6@I?3B?'>.?4@7'6A7.7K3?47CB7' F'' =U?BU&>A'BUA]
A7C4?' K ' $ ' ' ' @ ,) * ' $ % ' FAA7B43CV' 'FA'4@7'
=FL7=7C4' F'' 4@7' 3C<3''7A7CB7' 6F3C4' >&FCV' 4@7' -=IF6F&>A
4A>B4' ' ,!' *)' 3 ' ,*/* % '>'47A=''>66&37<' 4F'4@7'
<3A7B43FC' F'' 4@7' 7&7B4A3B' BUAA7C4' 3C' 7&7B4AF4FC3B' 7K67A3=7C4?'
Q@7C' 4@7' C7AL7' 3?' ?43=U&>47<' M74Q77C' 4@7' 7&7B4AFC3?3CV'
7&7B4AF<?>C<'4@7'=U?B&7' *)'4A' J % ' ('F ' ' @% * '
+, ' @>M<F=IF=>' $, * $ %' *) + % ' j=IF?>ABF=>'
4AU7' =IF=>' % * ' J ' @ ') ' ! ' * , ' ?7U<F,'
&(67A4AF6@3B'FA' - IF.?B_7AF43B' >A>&I?3?' =\8be' ?
+ % % ') ' / / ' F ' ' FUM&7' - IF?BF67' 'FA'4@7'
7K>=3C>43FC' >C<'<7=FC?4A>43FC' F'' 4@7' &>Q?' F'' =U?BU&>A'
BFC4A>B43FC' % ' 3 / * ' 3 ' , * /% $ + B'
j=IF?6>?=' 9 * 9' ' L * ' / / ' 74B' % ' @7'
j=IF4>43B'3AA3>M3&34I' F''4@7' =U?B&7?' 3?' &F?4' K *' 4A' * ''
\ $ ' % ' !6&' % / ' ,% ' @7'- I FC3B' &7B]
4A3B>&' 7>B43FC
(C) ' (,": 8' N83?' !LB(:,"D-8I' Z8 , ' $'
, / K / , ' T' % / 6 % ' %&(' ! \' %&' 8:+':7(' '
+:.+!(#'&' $!%&' %&(' !' &#'&') (1 ,"(7 %'
7+ ')1 '(,"!1"+ "#$"(88(!" # $!%&' 8) '(?
,": 8' * %&#'&' (3?F '(,"E!"' %
%)) ' + $ '/ ') ' ! ' - 3' IFB>A<343?' \ ' *-'
@% ' ' *)' ' ! ' ' % ' FCBUAA7C4' 67A3B>A<343?' = IF]
B>A<343?'>C<'7C<FB>A<343?' 4V3 'F * (' * / ' /
+ ' M?B7?? F''4@7' = IFB>A<3U=' >44A' @ ')' ! '
, F' <3''7A7C43>47'4@7'<3''7A7C4' = IFB>A<3>&'&7?3FC?' K +9
V6+ (' ' ! ' $' %)' IYB>A<343B'B@>CV7?.
) ! #" ' N8:7"-7-#"BI %' $' Z$' '
-8 *? * 0* '2' / ' 8 :+&h'F* ,"2 +7()"#/Y
+&& F'' \' %&# (8& $ (' %"/%7)' +# +:+ (''
.!("#&,' $ 8'@%)*+ %' % +' ') 2'F
! :"#& ' (#(7B(7 '' *6 %' !'- *$'8B)* +$' ,*)b
*'+$' %&#'&') ! #'E[" '%'B'
% *>' 1 ' $' :'-7' /*) *')'%) ! ' % *'
C ' !', $ ' %' >C'%, ' IFB4FC3C7'3?'FC7'F''4@7'4QF'
?UM?4>CB7?' 7K4A>B47<' 'AF=' >BFC44U=' &IBFB4FCU=' MI'
A>V7C<FA''>C<' 6F@C' X ,!' *)' 3 ' ,*) * ' '
) / (8 ' N8+"?-/"+&8I' Z$' ' B' ('
($!& '#&9! \' ! ('"#/ 8(,& .)' (' 8) / (%
K'(' +--' >433' + @ ' ' ! ' ' %'
4?'P4@7'8C77.H7A8-?#=IFVA>=?@7Q?'34'4F'M7'>'?3=6&7'4Q34B@
) / (%'N8+"F-/ ($I' Z$' ' fBH I'
#'"#+! :8&#f$ ' !J"#/' ! ('"#/+ $ 8:+':7('
' #! ('!" #+ (#,' &7(9(!" #+' ' (') / (1 %" #'
Z $/%L/B*' &#'"7' / (="#/! 7\
%)*', $ ' ' % ' % ' 34@'MF4@' '&UV7A[?'>@<' U' "F3?-'
3C?4AU=7C4?' = U?B&7?' = U?4' M7' BU4' FU4' >C<' '3K7<' 4F' 4@7=
Q34@' >A7I[?' = IFVA>6@'4@3?' M'UCC7B7??>AI' >A7I'47A=?
4@7' 3C?4AU=7C4'1=IFVA>6@3B' 'FAB76?[' 6!B' 7' @>L7' >&]
A7><I'QF' IFVB>6@3FC?' '&33V7A[?><' U' "F3?' 7I=FC<?#
4F'4@7?7?' >A7I'@>?' >'<7<' >'4@3A<' K I(' '?-' +'
% %) /"(2 77" '" F'' (7 %!8 ' Z$' &'' ' #&9!
H'F 'F Q' &!("#"#/! ' ' ,#&&,' .)' !%&
8) / (%' (7+ ' &!("#"#/! ' ' 8) / (%)
K F' ' +)+%' ' ' +' ' @FQ3C'=FA7'4@>C'
U(U>&'CK374I'4F'6F3C4'FU4'?F=7' = IFVA>6@3B>&'7AAFA?' K ('
1 ' ,* %/)' %)>*' P777' 6A7B R' % 9' C % '
&&') ' IFVA>(3B'4A>B3CV?
8$ 6 $'N8+"" 1/ (%I' % b^B' Z$' '
$' F Q' ' ,&+' " !" #' $' 8 :+'7&+' !%&' ,&?
+' " !"=&' +'"&#'&' $'8 :+'7&+' &#'&') 1/ (.&
) 2+$ (%"+!' #&' * % ' "+' . "77& , ' "#' 8) / (%)
K*>K % ' , * %/ , ' O ' 9' , * %/ '
' + ' ' ' ' %/ '
) " , ' N"#-'"" #' ,(7I'%' % I (B' Z$' '/0 0'
8 :+& h'F " $' E :+&F"B&
* ' ' '4A' & '@ ' * / ' < ')+ -
8$ 6$' N8(" F/ ,/"I' Z(, ' 8 , ' $,*0
* %'D +&& ' (#' ' I' (' %&' +'"&#'&' $
8:+'7&+' !%(!' (! $ (#(! 8)' *%"'% ! &(!+# $!%&
8:+'7&+' . ' 8) 7 /"'(7 ,&+' !" #' !%&' 8) F
7 /"'(7 $&(!: &+' 8:+':7(' (#(! 8)' $ (?
!"':7(' (#'8(7 ' (! $!%& . ,)
K)(' * '@% * $,* ' A7' ' ' "FF8' Q@3B@' >&&' C>.'
4F=3?49' 8M?7' Q34@' A7L7A7CB7' >?' BFC473C3CV' 4@7' A>B&7?' F'

IF&FV37' 2> '@ ' %' ' ' 2' ''Q7'>A7'>&&FQ7<'
4F' = U&43&I' U?B&7?' 'AF=(' 4@73A' >667>A>CB7' 3C' L>A3FU?' UM]
H7B4?' Q7' ?@>&&' C7L7A' >AA3L7' 4F' >' 67A'7B4' IF&FV1' + '
'@ . * 'L33'33'B +*C ' '* ' 47CF' 4@U?'BFC]
B&U<7?' @3?' IF&FV1'F''4@7' >V&7')6+/' & # ' ' '
/ % '' B C * ' IF&FV1' 7UAF&FV1 '>C<' 6&>CB@CF&FV1 '
44R F ' % ' 764'2 ' !AF=' BFC?3<7A>43FC?' F'' = IF]
&FV1' >C<' F?47F&FV1 '4@7' BA7>=7A' B>CCF4' M7' 6&>B7<' >&FCV'
Q34@'4@7' C?7A3C7' M3A<?
&#'&') 7 2/" ' M7 E/7'(7 %!8 ' & !("#"#/! '
' ' #'& #&,' *"!% 8) 7 /)') 27 / "+!' #& *%'
+!:,"&# ' "+#&9 & !"# 8) 7 /)
+ ' #' +)+ % ' * ' * ' : $ '
& ' + '5 &T ' * ' ' ' $' $' + '
' & & ' ' ' ' ' 6 ' '
456 # ,* *)% ' 6 ' $ 6$' + > '1 E
, * *) B& 6' @ ' ' ,) 4' > ' , ! ' *)'
% 06& ' ! ' R' 8$ 6 & ' E
') 8$!' N8 "QQ:F8(I' Z8 , ' $'
/ 0 8:+'7& H' 0G/% N'$' K3%/?)*-$' ! (8 I'
!:8 : ' ' 8 +&,' $8:+'(' !"++:&
% *?' ' 'C ' U' '@% * ' ' % % % U=FUA?'BFC]
?3?43CV' F''?=FF4@'=U?BU&>A'3MA7' @>L7'A7B7C4&I'A7B73L7<'4@7'
C>=7'F''$, * $ % 'FA'- 6 * $, * $ % ' % 6+ (' , ' !
' % @7'B>?7'F''>'QF=>C' 'FA4I' I7>A?'F''>V7' 4@7' ?UM]
H7B4'F''=IF=>'F''4@7' U47AU?
&#'&') E8(! #'% ' & !("# #/! ' (' 8) 8('
) 8 2! 8)-' !%& &8 =(7 $ (' :!& "#& 8) 8('
.)'(., 8"#(7+&'!" # 2 ,!' *)' 3>' >43>!
)96/' < ' C % !' '74B' 2>>' ' = IF=>4FU?' '3MAF=>'
'C ' !', $ ' C %!' >I' * 2' C' 7CFA=FU?' U47A3C7'
4U=FUA'F''4@7' ?6FCV!=IF=>4FU?' L>A374I' Kk(' 6!' F'
2 ' 634' UAA7C4'H ' ' IF=F4F=I''FA' >&B3'37<''3MAF=>
") 8 ("7)'N83?'FE#+&#+"I' Z$' '"e:N IF' H+
8 :+& H' $ %' F ')\' "="#(!" # .)' !%&
8 =&8&#!+' $8"'&
)6E6=7.' >' ' F=7'>U4@FA?'@F&<' = IF=>CBI'
4F' M7' FC7'F''4@7' = F?4'>CB37C4'B3C<?'F''<3L3C>43FC#>C<'4@3C8'
34'3?' FC'4@3?'>BBFUC4'&4@>4' ?>3>@' KL '%*'A7B8FC?'=3B7'>=FCV'
4@7'>MF=3C>M&7'4@3CV?'F''4@7'3<F&>47A')977' #'))+'
-'(#) 8 %'N8+?-8 0$I' ** ' Z(, '8 ,
, * ' / %' $' ' H£=N IF' , ! ' 8 :+& F.-*/L/ 8
+%(&\' $,&#f' $!%&' ,"=":+" # ,*$* / %
N'#'7 :,"#/' 8"'&f (!+' , 8"'&-' &!' I' ') F
8 E %7 ' MM8 !9 %"#&' %!8 B' .&7 #/"#/! ' '
'%(('!& "+!"' $!%&+&' ,&#!+
% *' % ' % ' ' % ' @7' FA=3B7' '>&&'UC<7A'
4@7'<7'3C343FC' F''4@7' IF=FA6@&B'?7B43FC' % *+' '
6 ' $ ' *' '' 4@7' CFC.=UA3C7' '>=3&37?' F'' = IF.'
=FA6@?'4@7'<FA=3B7' ; IFK3<>75'>C<'=FA7.A>4?'; 6>&>B3<D5'
M7&FCV'4F'4@7' &<' FA&<'7KB&4(L7&I' % '@ *)'** ' *)'
' FL') ' C' / -/ + '4@7'3C<?FA?'>A7'B>&&>M&7'F''?76>A>43FC'
>C<'>6&FK3=>43FC'>?'3C' =FA' = IF=FA6C3C7'AF<7C4?
) #&' 7) #& \' +&&' '
!) #"'+"!)'N8+"'"'#'F+7!7!' Z$' ' '7:+!&'
$8:+'7&h'F \' :+' :7(' ' #! ('!"7"!)
V >B ' 3 B
) 8!%)' N8("N]F Q]"I' @% ' m(, ' 8 , '
$, *-% 0%' +&& F f "+&(+& $!%&
8:+'7&+' &#'&) (2!%7 '%
, + ' A , * / % ' ' = FAM3<' BFC<343FC' ' ' = U?B&7?

' ' ' ' ..' !ffff fffff fffff' O' ' VAFU6' F'
& $ ' K F '8 '@ ') ' ! ' '
$ & $ ' 2 '5 '3 & =" B
$ ' N8+:& I' 6' N(I' Z(' ' $,*/ ' (, '
7(!&' ' $, * /;' $, * / ' (' ' ' % 0'' *3- ' I'
'+% !F+"/%!&, ' & + #
.6E9' ' ,) ';7<' 2C?L' , ' 4'3?' CY4'@FQ7L7A'
=IF67?'>C<'<<'=7C'>&FC7' 4@>4'QFU&<' @>L7'4@73A'L3?3FC'
L7AI'C7>A'FA'L7AI'A7=F47' 2 ' 7' * ! ! (' ,) ' ' % ' '
&3'%+) 0,' IF67?' A7>C<'Q34@'=FA7' 7>?7'3C' 6>A43>&'<>A8C7??'
4@>C'4@F?7'Q@F?7'?3V@4' '67A'7B4' '?777 4 # " B
- ' ' / ' ') ' *+ ' * % ' B C
% ' C47&&7B4U>&' = IF67?'C7>A.?3V@47<'?67B3>&3?4?'
. ' % !8' %$) "'
72 ' '@(3 '>B % B % $ /'KL' 3?' '>B7 'Q>?'
4@7' '>B7' F'' >' @>Q85' Q34@'4@7' BFC4A>B47<' = IF67' L3??FC'B@>]
A>B47A3?43B' F''4@>4' M3A<
' 8$ ' N8+?"-(F " I' Z8 , ' (' 7(!&
-%3%' % ' ' * / I' % !F+"/%!&, /#&++
5 > '4A' C %' % !('@ , ' ';7<' 2C T +) 7 V
,) '?'0' @7' = IF63>'3?' FQ3CV' 4F' 4@7' 4FF' VA7>&' BFC]
L7K34I'F''4@7' M>&&' F''4@77(7' ' !', $ V' ' '%+%@7'
?4AUB4UA7' F'' M3?' 7I7?' M73CV' C>&UA>&&I'?UB@'>?' 4F' <3?6F?7'
@3=' 4F' = IF63>' ' 'P * ' % '3C' 33', +' @7A7?'
=FC7I'3C' = IF63>'>C<'<3?7>?7?'F''4@7'7I7'V7C7A>&&I
: ' R > Y%0' J % ' ' MS] * '
Q@F'@>L7'Q@>4'IFU'HU?4&I'B>&&7<'4@7' = IF63>' F''4@7' =3C<'
2 ' ' '@* C % - ! ' A7' ' 6'L 3' @7'83C<F''
6>A43>&'M&3C<G7??'Q@3B@'M7&FCV?'4F' 3C47&&7B4U>&' = IF63>
8$ & N8+"" -1 "B I' % ' 2 ! 4' @% ' Z$' '
' ' F'M F'' \' $ ' &7(!"#/'! ' '($&&'!&,' * "!%'
!#) "(' +% !F+"/%!&, ' #&(F+"/%!&,
.9:;'P & '3C' 0' % ' D ' >' @7' 'FB>&'&7CV4@' F''
?67B4>B&7?' A7YU3A7<' 'FA' = IF63B' FA' 6A7?M!F63B' 7I7?') 9-9
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. & & 'N##&FB!(+I'%' Z$'+ "'_'F)+\' &+&8 .7"#/' #&'!(%))*' '@' 'o' g' @44?4' ''C7B4>AFU?' <A>UV@4?' 6 1' ' ' !AF=' 4@7' V>?@' ' ?4A7>=' F'' 7B4>AFU?' @U=FA' 3??U3CV' '&FQK' K &)' N ' @ ' C*' ' % ' @7' '&U3<' ?7BA747<' 3?' C7B4>AFU?' * ' ' ('@ ' / '? ,',+' ' C7B4>AFU?' 'FF<' >' =F?4'>=MAF?3>&' M>&=

. & $' ;C7-84(5' P' '2 # 9' FA'>' = F< ' ') % +$ Y' +&&' F \ H$' : B' L' '# '!(& :+'$7:',' 6 ' % ' ! ' FU?' + ' 7A' 'F&<7<' 7I7?' AFQC3CV' 4@7=7?&U7?' 3C' 4@73A' FQC7' 7B4>A37?

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1> ' "' !) ' %) ' *!' ;%*),5'5>' @7' 6>A4' F''4@7' 'fFQ7A'4@>4' BFC4=C?' @FC7I'37'B>&&7<' @7' C7B4>A1 ' -* 9' 1 ' C ' @ %' ';7<' 5I' '5' @7' 4UM7' F''4@7' M&FF??F=' ?7AL7?' 4@7' 6UA6F?7' F'' >' 7B4>A1'3C' =>CI' 'fFQ7A?' >?' 3C' 4@7' FC7I.?UBB&7' K KK' ' ' (' ' ! ' / I>494!' @@V' @7' BFAF&&>' BFC?3?4?' F'' ?3K 67 4>&?' 7CB&F?3CV' >' 4UM7ABU&>47<' MA3?4&7<' C7B4>A1 ' %) ' ' % ' ') ' 5@;' F=7' 637AB7<' 4@7' C7B4>A37?' F'' 4@7' 'fFQ7A?' Q34@' 4@73A' 3C7' M3&&?' % *+' ' C ! ' ' ' ') ' C' >AA>CV7] = 7C4' Q@3B@ '>B3&34>47?' 4@7' 7K4A>B43FC' @FC7I' 'AF=' U37' C7B4>A37?' F''!'fFQ7A?

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B ' +' ' ; AM 5' + ' C' C77&<' QAFV@4' B>A674?' 4@77??7' VU7?47?' Q7A7 >&' L??@7A7<' >64&! -' O R ' . % + ' % ' ' 3 ' . ' ' C77<&7.QAFUV@4' V3A<&7 ' ?<6>' % '4A' * ' ' @ * / ' ' ' ?' 8? ' %* ' ' ' FU' <7?BA3M7' CF' 4AU7' "A34>3C? 'MU4' 6>3C47<' FC7? ' FA' A>4@7A' (77<&7.QAFUV@4' 7C' 3C?47><' F ''4@7 =
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&&, 7"# / ' N#$, 7"OI ' 6 ' 6' Z$' 9 'S I $' (' N &&' O: ! ' >4R; I' . ' %&' & (!" # $ "#'+& !"#/ #&&, 7&F .&(8+' !%&& 8&!% , ' $, "#/ ' !%'+
% +' 3??' # 'F * ' * &%$ / B' ! ' B'>3'MU3&<7A[?' 47A=' '=4 67A67C<3BU&>A' ?4U<<3CV ' 4F' 6>A4' F ' '4@7' >BU47' >CV&7' F ''>' AFF' ' % ') ' *)' '?L ' C7' F ''4@7' = F?4' 3 = 6FA4>C4' 7K>= 6&7?' F '' C77<&3CV' Q>?' 4@>4' 67A'FA= 7<' >4' "> I7UK'B>4@7<A>&' % % 'C %) & ' % / 'B'C+ ! B')%--* !B' ' BZ' ! 3V ' V3L7 ?' C77<&3CV' F ''MF44F= '?@FA7' >C<' ?4AU443CV' 4F' 4F6' >C<' ?7BFC<' A>87A?-
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! &&1, 7 : "-'" %! ' 6 ' 8+\' "' #-, &+' >F6' &, &+' -' #& , &+' ; FR' #&, &D' ; F6' #&, "+' ; FV' #&&, &+' R #&, + ' #&&, "+-' 5F6' ; &,) + ' V ' #&"," ; F' #&&, +E Z ' ' , ! B' ! ' Y +&& ' 6' (#, ' F \' $'#&'&++") ' #&' &++(' 7")E
4'KFFF' 3 ! 3B' : % ' LB * ' ' 3K ' ;% + 5' , ' >C7V>' 'M7F9' M7C>7=7<7 C7><&UCV>' @ I 3>' >(7C7?') 'KF<F' @ ' ' 6 ' 3C' @FA67' %G ' ' %)' @Q> = ><<7C' C I<3CV>' ' CI<&3CV>R' C3= ' BK>FF' ' ' * ' * ' ' % 'H @7' >=<<7AR' BA37G7<' C7<&3CV7' ; DUA7@' C7A7Q7' @F&7 '>C<' M3&7U7F' @3A7' M><7' M>'47C' @3A7
@ ' &'&++(' 7")E
%'K>> ' ') ' ' % ' 7<&UCV7' H7' = F47C' UC<7AUFCV7C' = 7 ')'% * ') ' ' % B ' '2B % ' 4 %,) ' && I<F&M' F '' ?4F8' G' ?4>C7' = FC7' C7<&3CV' AF4 ' G' Q>C7 ')'% ' * & ' %)&' ; > = M ' H' %) ' Z7?7' C?8 I CV I ?' = F?4' C (7 . ' &I CV7' M7' U&' I &&I <
6 ' ;7KB-' ' * ' ! % 4' ! FA = ?\" + .)' C7 <. ' C7 <7 . ' ; ' C7 < I .5 ' .)' - (-' C73<. $') ' C7 I <. ' ; >&?F' Q 34@' . &34 3 V7 ? ' .37 ' . & I 3 (7 ? ' .3? ' 74B 5#' R C7 < 7 &F CV7 ? ' P' ' 2 -' 6 ' T ' ! ' ' ' ??7' 6A7B-' >C<' ' 7B7??>A3&I # F ''C7B7??34 I - % ' + * ' ,' + ' ; F44 5 'R$>3&M7?43?C7<&3CV7?' = F?4' M(3 3&344 ')'3 4F' # +' $ ' 8?' $')K' >CC3?' ?6 3A34 ' = U4' C7<<3CV3?' <F' Q@>4' FC I' F '' M7?' L7A4U7?' <F3M-' AK (?F' ' $ %! %) ' ; > = <7C5' K45 ' 7<7&FCV7?' = F?4' ' ?3447' @3 = ' MI ' ! FA' @7' Q>???' = I ' Q7<U447' '7A7 ' + ' . o # ' '', *' 7<I&I CV7?'4@7<' I A' = F?47' 7V>' % K '$ % . ' 8 ' 'K' L33 ' *)' C7' ?B@FA4 47A = 7' 3?' ?7 4' ''&I '7' YU@7C' >&&' = F?4' C7 I <&I CV3?' 6>I '4@>4' <74
&&, 7)' N# , 7"I ' %' % ' Z$E 9 "' 6' H' F)7 \' &+& 8 .7"#' (' #&&, 7& ' #&&, 7&+ %)* ' * , ' / 5 ' '3C')) ' ' % ' * , ' 3A' ;%) +5 ' , ' @7' C77<&I ' CFQ' 3?' V7C7A>4 7<' MI ' 7?47A&I ' >C<' FU4@7A&I ' 3C<?' %) ' # (! ' * $ %' ' ;% %5 % ' , 3? ?= >&&' YU3B8' 7 I 7?' >C<' M&>B8' C77<&I ' M7>A<
%! a0 6 ' 8+\' "' #, , 7$ &' 5 #& , N&I7"' % - ' ; FR' #&NAI , A7) ' Z ' * !) ' N^' E ' + ! &*4' ' ' ! * !' , &#" &-' &(/ & #&++ \' g&(7 :+7) ' ' (&$:77) ' &(#&+!7)E
) ' 6FF' 4A ' C ! %(' ' 33 ' K3&3 ' 7?C3V' M3C3U' M (VC>' C7F<&3BFA' @ = 7' ? I &' C7' UC<7AM7F<<7 ' BKFFF' % 3 ') ! ' ' ,) , ' U<>C' V7??F ' FC' 7&7' FL 7' FC' Q3C7 ' 9 = 3A7' M>' ?3<>C' = 3<' ML' C7F<&3B7') ' OS^M ' . ' %(' + 7F' >A377C' U6' G' 7F<7C' C7FA' G' C7F<7+4B@7' (7A<7C' F ''M- ((A7' UCBU 7' 4>&7C' +F.*F ' B' %+ ! ' *+ ' 3A3C8' P?@7R' ?7C<7?' CFC' 4FF' 7B4>C>@U?' G' C77<7&I ' CI = ' 6A>379-' M>*4' @7' <F3&I ' BF = = 7' 4FF' B>A67C' @7A' 4 I &&' ZA3+ * ' ' ' *e ' ' ' ' 7' M74@F4' (@4' @ I = ' C7<7&I ' L7A I ' <>I 7 ' FQ' @7' = I V@4' L7CV7<' M7' C' 4@>4' &>< I ' ! ' &&2 -) $' %! B' 6 ' 8+\' ;' #&,) '7"N&' F7"B&' ; FR' #&, N&I %N&' ; FR' #&, 7) U0R' # , , &7) ' N ; ' , "I ' 6 #&&, 4) ' #&&, N) I7"&' F7) &' 6FV4' #&&, 7)E Z$E 9 ' 6 ' H' F !' ?' $' : ' ' * ! & ' ' '6 & 'B' ' T b-')) = &' &++(' 7") ' $ #&' &++")
K (' ' % ' ! ' , ' ' ' % , ' &&7' MF' M>4' ?7 I -'@7' = ' M7@FU7M' C7<7&I ' $7I'>BFU67' F<' F ''@7A7' 'F&I7 ')' % ' O' * ' ' %) ' ; F&&?5' + ' 7<&3B7' >4' M7' I ' = F4' Q I ?7' @FQ ' @F' M>C' V>4' M I ' ?FCB' 7A&I C7 ')' K (' # + ' $ ' 7&' 8?' ' + ' B@' ?U'3 B37CB7' F ' ' = >C' = U4' C7<7&I ' M7' #FLUC' F ' ' F<' 7. F' 4A ' ! ' : F&&?5' ' , ' 7' = U?47' C7<7&I ' FMM7 I ' 4@7' QA34 I CV7' F ''4@7' 6F67' %+ * ** & 1 ' 2 , ' ; (4FC5') ' MM' &FU4@7' CFA' <7&>I ' CF4' 4@>4' 4@FU' = U?4' C7<7&I ' 7K7BU47 ' % K ' / # ' * ' ' ;% * 5 "' 333 ' ' >' 4A7C7' L7??&&' 4@7C' = U?4' 4@FU' C7<7&I ' <A3C87 ' % ') @ ' % ' $ ' ' ' VAFQ ' 4@FAFQ ' Q@3B@' 4@7' C7Q' = >AA37<' BFU&&7' ?@FU&<' C77<&I ' 6>??7 ' %)+ * ' ' * $ $ ' 'K333 ' * ' @7' 7?U347?' Q3&&' ?43 ' C77<&I ' @>L7' 4@7' F = >C' @UAB@' 4F' M7' 4@7' >4@F 87' @UAB@
$ I&&, 8 & : ! ' N# , 8&#!I ' Z$' 9 ' 6' ' D \ $E / ' %"#/ + #&&, &, ' #&' &++("&+' / ' & + #(7 &O :"+"I&#' ("&, ' (+' 7 : / / (/&E
% ' " C ' < '%' 3 ') ' ' <Q>A'7 ' Q7>A37<' Q3&@' M7>A3CV' F '' @7A' M>V' ' "C77<= 7C4?>4' @3?' M>B87 ' %)') / - , ' 4 & &') ' ' ' * ' ; %) + ,5 + ,) ' F ' 6AFL3<7 ' >66>A7&&' >C<' FA@7A' C77<[= 7C4?' 'FA' 4@7 = ' %*+ ' ' % ' ! * ' %%' L3 ' @7A7' U6' 4F' 7>AC' 4@7' C77<= 7C4?' F ''4@7' <>= ? ' @7' 'FUC<<>= ? ' FU' <A3L7?' ' ' 4 # ' * ,' * -' ' 6) 1 $ ' 3C' @A' FA<?Q ' $ ' ;% %5 % %+ >AA I 3CV' 7>B@' @3?' C77<= 7C4?' 437<' U6' 3C>' 6FB874' @>C<87ABQ37 ' ' K), ' / ' % ' ! '3 ' FCV6FA4' ?U66&37<' 4@7' BF&FC3>&' 3?&7?' >C<' 4@7' 6&>D4>43FC?' Q34@' >3&' 4C73A' C77<= 7C4?
4 ' / ' &&, +' &O :" & 8&#!+E *') ' %
) ' ' + ' * $ $ G ' ;% * 5' +' = >C'?@FU&<' 3= 6>A4' 4@7' M7C7@47' 4F' 4@7' C77<= 7C4?' >C<' C7B7??3<7' F ''F4@7A' %) K ' : @ $ % ' L3 ' K ' % ' @7 I' @>U7' CF4' &7'4' 4@7' 67F6&7' ?U'' 3B37C4' 'FA' 4@73A' C77<= 7C4?' % *%' < & ' @ ' 0 * &' ' &>= ' ?74' 3C'HU<V= 7C4' FC' 4@7' C77<= 7C4?' F ''F4@7A?
! ' .) ' ' 6 ' % 0B' Z(, ' ' ' ! ' % N ' ' % ' * ' ' % ' (' ' 0 ' % 4' $' N I ' ' ! $' ! ' '7"#'!% ^' (' ' ! ' ' ' * % ' N ' ' ' ' * ' % ' (' ' 4' ' 8! %' N * ' '8* ! % ' * ! % ' * ' '7"#'%&, '#('7' # O# ! IH-
>K 44' ' ' **&' ' ' ;%*+ 5' %%%' @F' Q3&&' CF4' @U = M&7' 4M7 = ?<L7? Q3&&' '3C<' 4@73A' FM?43C>BI ' >' C77<.C>3&' 4@>4' Q3&&' 8776' 4@73A' = 3?7AI ' 7L7A' '>?4' FC' 4@7 = '
! '7"$&&, F#("7) g2' E"E 6 ' Z . ; (, EL-"L<H' '% ' 'Y +&& &' Y ' % ' , ' ' +&' : &' $" 87)' .)' 8&(#+ $ '7"#'%&, '#('7+' N && (7+ ?O : ! ' >4A4 I
) ' ' :@*+ ') * ' <+ ' 8?' ; ' 5' $ % ' 4@7A3?' ' @7?' 3C' 4@>A7' 3 = >V3C>44FUC' B&F&?34' L6 ' ?#<4 ' >C<' C73<C>&34' 4@7' ?>= 3C' (7443?' F ''FUA'@>7A74>V7 ' ' @ ' + ') * ' $$$' #' ^ UM3&&' @7' C73<' C>3&&34' >C<' &FB83&' 4@7' <UA3?' 4@>3AF' %) ' + ' % ' , ' ' 5' ++' ' L37U7<' >&?F' 4@7' I >3A<?' >C<' B>U?7<' C77<C=&7' 4@7' <FA?') ' 3C' % + ! ' +-' % + ! % ' L3 ' ;% ,5 *)' >< I ' >U<7A< = 7 ' B>U?7<' C73<C>3&' >&&' 4@7' @UAB@' <FFA?' >C<' Q3C<FQ?' + ' / ' V, ' Q3C<FQ' +' ??U<' 4F' M7' C73<C>3&K ' Q@7C' 34' 3?' ?F' '3K7<' Q34@' C>3&?' C' 4@7' 3C?3<7 ' 4@>4' 4@7' ??>?@' B>CCF4' M7' &3'47<' U6 ' @3?' 3?' >C' 3 = 6AF67A' ?7C?7
$&&, F# ! 'N# ,#$-I ' Z$' 9 ' F' 9 I' # :###&'&++( ) ' !%'#/E
M)Z!' !U4 ' @ % ' 3 ' 333 ' ' UB@' V&3447A3CV' C77<.CF4?' 4F' @U = >C7' @>663C7???' % ' 4 : ' F ' C % ' L33 ' K&3 ' N % , ' @>L7F' CF4' &>3<' FU4' 4@7' L7A37?4' 4A3'&7F' 3C' C77<.CF4?' % ' ' < # / ' , ' +' UAB@>?3CV' 4@7' C7B7???>A37?' ' >C<' 4@7' = >CI ' C77<.CF4?' Q@3B@' FC7' BFC?3<7A?' ?F' 3C<3?67C] ?>M&7 ' >C<' ?F' ?FFC' '&3CV?' >Q>I
$-=&, "\"N&T = ("(#!# $ 9 (' 6 ' N#$, D ' % ! ' 8+Y "' # - , &+' >F6' &, &+' -' #& , &+' ; FR' #&, &D' ; F6' #&, "+' ; FV' #&&, &+' R #&, + ' #&&, "+-' 5F6' ; &,) + ' V ' #&"," ; F' #&&, +E Z ' ' , ! B' ! ' Y +&& ' 6' (#, ' F \' $'#&'&++") ' #&' &++(' 7")E
(' # /&#&$(7 :+&' *' %
C' %+ . % ('B' 'A7YU7C4&I' U??<' Q3 &'6 * %'M!!!' %G '8 !'K 3' 7' MF' @3C7' MFCC7' C7<7?7' F ' ?&FH7 ' F 7' UCQ3&&U = ' ' ' * ' ' ; >U<' 5' >C ' %% %' 3' ?BF&<7C7<7?' ' + * ' ') ' ; F44 5 ' ! A>' ID4' 43 = 7' C7<3?' @>3<' M>3' F' 4U>' 3FAC>I ?' >6FC' >' <>I ' / ' ' @* $ 'X ' >&&54K ' , ' 4' M7' 7U3&' BAF?' C7<7?' MU<' M>= ' 8C7&7 ' . ' @ '@ ' ' K333 ' , % ' P @FUR' >A4' ?F' &F4@' 4F' 37U7' 4@>4' &7U7' >2>&4' C7<7<? ') ' ** ' ' # ' / ' %' 44 ' ' 7AB7UICV' Q@>CC7 ' >C' >AVU = 7C4' 6AFB7<34@' 3C4F' @3 ' BFUB&U ' ?3FUC' C77<3?' K (/ ' ' F%' B B' P 7R' B&>3 = ' >C<' 6AFL7' >' ?UBB7???C' >C<' 4@7A7' FA7' C77<7?' >' L393M3&3437 ' AF = ' 4@7' 43 = 7' F ''4@7' >6F?4&7?' % * ' 2 ' @* $ ' C+ ! ' ' ' KL ' C<' C77<?' Q7A7' I7>A?' >C<' &U?4A7?' &FQC' A7' ?4A7CV4@' F ' ' = >C' BFU&<' L>CYU3?@' 4@77 '
.E # '7(:+&#' #!("#'#/' $ +
, *>-' & C* ' 333 ' 6A ' K33 ' ;%) 5' %)' 7<7?' 4@7' QFA<7?' = F47C' M7C' BF?I C7?' 4F ' I$F M3CV7?' F ''Q@3B@7' M73 ?6787C' ++ ' : %) * 6 (' J ' ,) % 7<I?' ' / ' = ' I' Q I3 ' ' G' = I ' B@ I &' <7AI C = U?47' &IL7 ' ,-6 ;=97 4 #' + ' L333 ' 3 ' , * ' 767' <A>U7M47?' F ''<74@' 4F87' @7A ' 4@>4' C7<7?' ?@7' = U?4' <I7 ' ' ' 1 ' @* $ ' ; AM 5') ' ' U4' C77<7?' 67A' MA47 ' = U?4' M7BF = 7' BFC47C4' F' = 7>&4' 3C' = 3C<7 ' %)+>' %% $ % ' +) 4' = U?4' M7' C77<?' >' L7A I ' A76AFL7>M&7' 7L3&&' Q@3B@' B>U?74@' ?UB@' >' 'U&?F = 7C7??7 ')69 .' $ ' ' F / ' ' 4F A3CV ' <FOC' >?' C77<?' @7' = U?4' @F' B>CCF4' ?34' U6A3V@4 ' " &' !7) $ 77 *"#/' !%&& = . ' "# $ + ' ' ! % ' F + , ' & : ' ; 5)) ' F ' = 3B@7' 'F&8' M7A' Q>?' I . ?&>Q7 ' 7' = F?4' C7<7?' F6FC' = 7C' VF ')' % ' 1 # & %' $ ' 7&' 8?' ' , % ' 67?' M3CV&?' = F47C' C7<3?' M7 ' MU4' (3 4' 3?' CF4' >CFFC' 7C<7 ' ++ ' : ' %' 9%' 5' %%' @7' FU&' = U?4' C77<?' @>L7' 4@7' ?>= 7' >???FC?' *+ ' 4) *' :%*+,5' <9?' 33 ' %,) ' '7L7A I ' 4@3CV' = U?4' C 7 (?' M7' BF = = 3447<4F' F7=61 ' % , , ' ' C %) 6 ' 1 ' ' *+' @7' YU3A7' = U?4' C77<?' @>L7' ?F = 74@3CV' F '' 4@7' F&<' B7A7 = FC37?' FM?7AL7<' FC' 4@7' >B@?3F6 ' ,96 ' ' ' * ' ' + ' *' ' = >C' 4@3C8?' 4@>4' @7' = U?4' C77<?' UC<7A?4>C<' 4@F?7' Q@F = ' @7' ???7' <>3&I 4 ' @ * ') ')- . ;' 0 ' $ 6 , ' * F * ! ' 2 ' 7 ' ' C7<I ? $ ' ' ' '

' ( ) ' 3';%) 5 % ' 7' MA3CV'3C4F'4@7'QFA&<'Q34@'U?'
('6FFA'C77<I'UCB7A4>3C'&3&7
. ' $'+&('%Ÿ 7 +&' (#9" :+
>' ' 4 ' '@* $ ' ' @>4' C77<37?4'?7>AB@' '
CF4'>L(&' F''3C<'>'A7'UV7'@7A7
H ' #,&' (' #&'&++!') *' , ' + 8&!%'#/' 6 (B
)'%+ ' 0 ' C*'% ' ' ' '3K' :" ' 5' '' , ' ?'
4@7'B@3&<7' 7?'U'Q7A7'>'6UA7' = >C'>C<' CF4' VF<'C7<I'4F'8767'
4@7'FM?7AU>CB7'F''4@7'&>Q7
H ' &&,$:7'#&'&++( )'
%+ *') ' ' !00 B ' KK :'3' ! U&&7A? 4@>4?@U&<&!IL7>C<'
FM4>IC7'4@73A'C7<I'?U?47C4><FC'MI'=7>C7'F''<A>67AI''%' '
'+7C*,' *':' <7' 5' @7A4F'?FFC7',>???C4'!FA'4@>4'
=7'4@ICB74@' =FF?4'C7<I' K)F' : '@ ' ,' #' ' @7?7'
FUA'?@36? ' A7'?4FA7<'Q34@'BFAC'4F' =>87'IFUA'C77<I'MA7><
&&,)% ,'+&& 9 && ,)7"&'
=(' $'9 " '%! a' && $'=(' $'9 ,"'
&&/& '=(' $'9 .+'$'9
h' &&7' .+'$ 8' $') U
- ' '9 *" '3C' >8&U1 4' *,';% 5 , ' 77&'4@7'
B@UA&7'*'<UB>4?
$' &&7&' .+'$ 8' $'$
+'3C' A. U&B87A'),' - + %'B=<
&&7F/(*' .+'$ 8' $'9
&&" \N#$8I' 7+'#&&8.'#'8N.[' Z(' "#,"
' ' , B ' $6%F # (+!' #,"(# ! &&' !%&
8(/+(' 7+' '0
)9.-' :$ ' B4 ' VAFL7'F''C77=.4A77?' *>
P???' 4 B4)97') '*-' % 'C4AF<' '
"A3V@4'Q34@'A>VA>C4'M&F??F=?'MFAC7' "I'C77=' >C<'M>UMU&
' % 6' *"1%'* B6**$B&!' '
K ?)' B')' B3'(@ %)' & $'+ '?F&3<' >'# B>&&7<'
77='F3&'FA' %,/+$' $'%,B'3?'FM4>3C7<'AF='4@7'A367'AU34'
F''4@7<' =>AVF?>'4A77')96+!' ' ' %'3L'333' @7C'
4@7''FF4'7&&'>?'4@FUV@'34'4AF<'FC'63&7?' ''C77=$M&FF=?'
&&8 7)' .+'$ 8' $'9 (" '%!
&&#'# !%',"(7'$ 8' $'9
&&#!"+%&Ÿ+&&') '
&& ' N#$I' 8+Ÿ'" #-' " ';FR' 8&
;F V #& &'RF6'#& &')'#&" ' RF' #&& ' N3
#&(' Z ' '&/B(,' '%/+'9 'B' '
'3/%' N+!"77"# 8 ,' *'(#,' '&7I' *(+ .'
(, !&,$' 8' #/7'+%6
$' '!:#" ' 7+'% 6
@7'U?U>&'C>=7'3C'>&' B'<3>&7B4?'>C<'BUAA7C4'3C' FA4@]
U=M7A&>C<'><C<'?F=7'?FU4@7AC'BFUC437?'
)'*,' * /+'F * ' ; 7???&?5' '+ ' ! / 'C>76')'KFFF %3'
) ! ' ,K+' 7>&<7'M3C7' MFCC7 Q3'5'63?>C'G'M7>C>'G'
C?76>?' % ' ' B' ; ' "F<&'VW3I'3C'= 3=Z)& '
. T T 77' M5 ' 4$@3?'&I''4F' 67C>UCB7'M3?'VFF<=>C'@>5$
.<I(4# ' C76U?'@7'74'7B@'<>I' c% + ' *$ '% '; 87>45'
,)' >C'3C'4@7'H7A<7'6U&4@'C76U?' c%+, '@% %!*' +
@3 FQ'A>67'>C<'C776'3C'6&>B7?' <A37'3?'?FQ7' <+*F'
('0 %6'K'2 *3'B' J *-4'KK3L'^UM347'>?'>C7'
C736'>C<'AFUC<'>&?'>?'>C7'?73&&' K (' ' & *'
;% %%5 V> FA7443?'4>=7'C76З?'>C<'6>AB7&I'>C<'F4@7A'7AM3?'
F''=7<7BIC')7-' $' -' ;% 5'3L' 767?'
>&?F'>C<'A>67?'>C<'A><I?@7 =>I7'M(' Q7&&'3CFUV@7'67A-'
=3447<')/6-' & ' F * * ' ;7<' +5' B'>'4UAC36'FA'
C>L7Q' @7'QB .<'3??43&&'A7473C&'<'3CT 7A7'FA<?@3A7')6.-'
#' %0' ');%* 5 K)I' ?'AFUC<'>?' '776'
BF=7'4F<&7C'@>=7' 2> ' 1 ' *)' ' 6 ' 8?'
'$',*' U3BI'C776?'4@>4'=7&&'3C'4@7'=FF4@'F[4@73A'>3C'
>BBFA<' ' ' <' %)&'*-'F*!'KL333' @7'&><<37?'
6>A><7<'4@7'L3&&>V7'Q34@'C776. >C47=?' ' 4_3 '
C%G %' >@ FU'=3V@4'>?'Q7&&'?7C<'>'@UCVA!'?43A8'3C4F'
''37&<'>=FCV'C776?'>C<'7K67B4'34'CF4'4F'7>4
H'@'J !'' /'NLI' 6
)'KFFF'3 4! 3B'F * '3C' A. U&B87A'% ' %/%' +%-)*8'
?67A7Q1A4' 'Q3&<7'C>76' 6!'%)' /% ''+ '6 6+0'
)*B'Q3&<7'C?76' '!KFFF *B') !'$$$'K,' F'Q7C?7>&'7'
C3=' '@A>7=C77'!FA'>7CV&3?BC7'C>76'G''3CU&' %'2 ' '*''
C% *' ; C7B<' KFC5' 'C *' %'Q3&<7'C767
@ *$/'@% ' 0%' 767'@7AM7')*'*7+' !%B')+)+ 6 %
&& ' && ' .+'$ 8+' $'9 ' 9 "
&& '%N#7&0I' *'! % ' 8+Ÿ';FR'3##& &
RF 6'3#&& '6'3#&" N&'3#"& &'6#&(&'4F3
#&(' N4' "#&('3&(I' Z ' ' & %' &
(# 'B'-* % '>' * N(4=3' ' 7&8$'N[L]-'
' B' :' ' B,' ' ' .B ' ' *'
8(+' N ' ' $& #I' ' ', %' ##&:!' N *'
' %' ' B' (' ' '+ *'8+ '8(+'I' $':#?
'&!("# "/"#\" 'B",##&)
C'BF==FC'<3>&'U?7'3C'4@7'CFA4@7AC'CFA4@-=3<&>C<'><C'
7>?4?AC'BFUC437?#'4@7' U''F&8' B' ' '3?'6AFM''AF='
%' ' '@ % A' KK33',% 3'C7A7?'7A7'4FAC7<''FA'LC.'
YU7A4')' ')' ' %' 'KK33'2 %+ ') 4%,' 4'MA>83?'
M7'?4>C7'6>4'=>C'4C'M&7<I A'FA7'C7A7'@>?'4>C7')' *2' 6'
) +$';K),5 ,' 67'M7A4' F''?B@767'M7'C7A7'6FU'4>87'
)'++'@ *$/'@% >' 0# 77A7'F''>'M77?4' ' ' /'
FL * ' K'KK3L'!')4@'4@7'>4C7???'F''C77A7?'F''=7'
Q7&@7A?' TU,' *$/')*'L')*' >C?>I'4@>4'3?'VU<7'4F'
6UAV7'4@7'C73A3?')7+7' & ' //' ,$*'B; @(C'
,'4@7'C73A7' '4 ' ^@* & &' ' *' % B'
FA' % B' 4@7'83<C7I')9.9' % '' F * ' *1
+ (' + % ' + ' 3&&'IFU'7>4'>'6>A4'F''4@7'C37A7Z'
> ' '4 ' ' %)*' ' *^'%QFU&<'&387' '<3?@'
F[IFUA'B@34?'>C<'C7>A?
. % 6 -'(+' 0) 'E ' !8'B-%,'0 ' '
*** 6 ! '' ';% ++5' K3' @>4'C>'!&7?@FQ>A' '4>8'
FU47'F''FC1'=U4FCC7'4@7'C7A3?'FA'4@7'C7A7BA7??' '9.-'4 =
' F % * !' -),)'?' ' B ' B'4@F?7'
?4A3CV?'Q@3B@'>A7'FC7'4@7'C7>A@'4@7'83<C7I?' %(*'>'J'
' 'F * ' ' @7'C7>A.7C<'F''>'&F3C'F''L7>&'3?'4@7'6>A4'
C7K4'4@7'83<C7I?' K)' J ' ' F * B' % '-% '4@7'
'>4'AFUC<'4@7'83<C7I?'3C',>'?@776'63V'FA'F4@7A'>C3=>&'
&I& '%N#&[0I'($& 8+Ÿ'5F6#& ;FV#& &
6F'46Ÿ'#&" '6'#&(&'V#&1'#&& N&'VF4'#&1&'6F'
#&I& 'Z #! ('!&,'$ 8' $'9 ,'(+'! '$' "

>' &=&' %"&$7)'/*)
'0 #'*:.;7 7' QF&<7'>(73C'Q7C<7C'M7F='4F'@3?'
'F&87'>C<'C7A'))'2' C7U7A7R'?7'4'>.(7C'47FC')' 2' % '
* '*2' 7A7'CFQ4@7A'?67874@'&3=' VFF<' % *.(' ?S'
(' * '%'L3';87>45' '$C7A7'<7?IA7<'QA>4@7'F''4@7'
67F6&7'C7'3C<3VC>B3FC'F'' 4@7'QFA4@I')' *2' & *' * !'
C'M7??A7F''VA>B7 4@FU?FC<77U7C7'>C<'C7A'FC'=F'
) " '@* $' KKKL'2' @I'4AUM&3&'V>3?4'?>3&'C73A'
=F3A'M7'<7V??4' ' #'@ '@)'B C2' @FU'
V7447?4'?UB@'6A>3?7' A'C77A'<7B>3?7' %' > ' ' @* X' '
B> C ' F'4@7?7'7K4A7>=7?'?@>&&'C7[A'4@73A'F''3B7'<F7' K) F'
2 $ #' / %''#'L33' *' ' 7' C7[A7'=U?4'=77#>V>3C '
% ' 7[A7' =77#'>V>3CZ' *' ' F'C7L7A')6*9' $ %'
@* ' *' % / ' FU'@>LT'4@7'F&<' AFL7AM'FC'IFUA' 3<7'
>UV@4?'C7[7A'3C' >CV7A' ' +$- ' * +'
'3' 7[&&'C7[7A'67A=3&'>'FA73VC' 'F7' C' "A343?@'VAFUC<'
4F'A>&&I' 2' '3C' FB8@>A4')* 'B C ' 2'
@F?7'<FV?'4@>4'AF='@3='C7[7A'QFU&<'AFL7'
!. 'H'G*' (' 'B# *'# !' 6
,*9;'1 # &%' $ 7&' 8?' ' '673'?73<7C'4F'@3='
@7A7'3?'@7Z' C<'@7'?73<7' 'QFF4'C7A7' B' * ' .'
B C 2 ' @7A7'P ' Q@74@7AR'34'M7'MI' A>'4'FA'M7' IVAF.
=>CB I7' 'QF4'C7A7' B' * '@% '%,' 2' @7A'FA'34'V>C'
<F'B7A47?'QF4?' 'C7A7' +') ' 8?'
'QF47'C7A7'Q@34@7A'>C'I'6A7>B@7A?'QFFA<7?'FUV@4'=FA7'4F'
=FU7'IFU('% (' '+ . 0[X' @)B'B C' >I' 'QF4'
C77A7'MU4'34'M>4@'&7'4'M7@3C<'34'>'Q>&7'3C'=I'4@AF>47'
B')' +&,'&: %&8'3C' 7('&' $'! ',&="7
% K+! ' J % ' L333' @7'C7[7A'M7'3C'=7'?3A'3"' '4@3C8'
IFU[A7'?>'7' % K)'O' ' 7'3K'$Q>?'>4'4@7'?7>AB@' #'MU4'
C7 7A.M7.&3B87#'BFU&<'4@7'I'3C<'4@>4'Q>?'4F'4@73A'6UA6F?7
' ! ' ' ['3
%'% ' + * ' ',%,+*" "F4'C7A.67.&7??'FA'@3?'&3U7&><7'F'
M3?B/('?3?67C@7'4F8'67@<>7')'%+' C ,<' %, ' 7A'4@7'I&>443A' 7'
5A"'U4'C7A'4@7'&7??('FA'>&'@3?'@7U I'>A=UA7' 7'F&FQ74@'
@7A' ,--6 : ' B' ' ; FKM5' ' 7A4@7&7?'L7A4U'
F''C7BT??I47'$QI&'=>87' ' +'H ' % $ '*/ 'K)'M'
7A74@7&7??7' =>CI' 6A3CB7?'4@7A7' M7(' QM3B@7 >MU?7'4@7
')+
! . ' ' (' '% ' % ' 6 ' ,
1 # %'@ * ' ++ ' ' '' ' ' ' ' ' '
'FQ7A?3C'4F'4@3'?FU&7')'%+' C ,<' %, ' 7A'4@7'&>443A' 7'
7&<'34'C>4'>&' F&I'4@>4' 7''A7I'<3<'B&>43A
' *$6'(+' '! 0)&%' ' ,' 0!, ' 0 '! ' '+
' (0 ' '0+--) !'0*+) !
3 ' : ') ' '33'33' +)' 3?'C7Q' S3CV<F=7'F''
C7A7.B@>CV3CV'C3V@4' O' ' ' ' 'K3&' ' >C4'
Q3&& 67A3UA7' @7' C7[A7'4FUB@[<' 7?+>&&' +>+' ' '
+ (' %) -) ' 8?'; AF?>A45' ' ' 3B7'>'C7[7A.?U''3K7<'
A>U7' %(*' "# @7'Q@347'?FQ' @>4
'FA' @7A'4@3A4I'C7[A7.?77C'6>6?'Q>?'>=[<' %) '
3C' ,! ' :+ ' %'K3' ;%) *5' , ' A=?' Q@3B@'4F' >C'
C7[7A.<I3CV'!>=7'>''FA<' %'%* +' ' $ ' % ' J *$%''
8?'%* ' ')' L7CVP>CB7' F''C7[7A.7C<3CV'@>A=?
' ! 06 0 **!=0!*0 **! B0BB0C0D4<0, B '
$' (0 -
)'K+(Q' * &' ,' 'KKK33',))'6FU'C7A4@A3''' / ' !'.4MA3?4R'
F'' >&?A7A4@'C7FU'C'C7U7C<'3?' 63' C>=7' 4<I?' 'C+ [
7+ '+/*'' C ' 8?';%* ,5 ' '[3?'4@>4' 7A7.M7.VFF<'4@'[
FC' >?'=><7'=7'<F'Q@>4' '@>L7'<FC7' %'% K+' ' +'
*-%' %,'L'3'3C' G'C % 'K)' BFU6&7' F''>?'
>AK>C4' C7[7A.M7.VFF<?'>?'7L7A'B@7>47<'>'6FFA'6F74' K K+'
J % ' KKK' [I7'M7>A'Q@>4'4@7' IFUCV'V7C4&7=>C'
?>I?'I7'<AUC87C'C7[7A.<F.VFF<'Z
&I& ' ' '!8' / ' 8+Ÿ'RF6'#& &'(' V
#&I &'(' &I' ' (' 4F' #&I& ' (' 4 I % '#(' '3
#& ' (' #(' (' #((' # ! (' &!' &&' (7+' 9 "
Z$' &' ' 'H' %!8B'>' \' &=&' (' # !' (' #
C'BF==FC' CV'<3>&'U?7I#'FA'FA=?'?77' ' ' % ' '
)' + '@ % ! '*'' + 6'3'),,' IV@4'C7A7'>'<7&' 6!'
% +'LB@7'FFC'?F'AF='F4@7A' @>4'C7A7'>'?3?47A'4FUB@7'C7A7'
>'MAF4@7A')'% *' 7'4@FUV@47'.@7&FL7<
@7A'C7A7'>'<7&7' K (' '"C ' % ''*+'*-' +$B'%%'
3' @7A7[?'C7[A7'>';7C4&7=>C'3[4@7'BFUC4A7I'@>?'4@7'&387
@U=FA?'' F'3' 4@7' FMMI.@FA?7'>?'4'@>U7'), L &
@ ' * %'33' FU&<'3CC7A?''C<7'FU4'C[A7'>'FC7' FA7'34'
4@>C'&(77' 'FA'4@7=' 4F'?634'U6FC'3<' % *('8 ' *$'
:*' 'LC3'33' @7A7'3?'C>AAFQ'>'FC7'F''>&'4@F?7'F''3B7A'
'7&&FQ?'MU4'&FB8?'U6FC'@3=?7&'4F'M7'>?'VFF<'>?'>AAFQ'>'
YU3A7'F'' $'>-I7>A' %*)' & ' % $ ' % +'3K' 4'
"AFF?77'4@FU'@>?<'C7[7A'>'7&&FQ'%*)'O' G%* ' '% +'
@7'C7[7A'>'M34'4@7I[A7'3&&'4F'6FFA'F&8' % K)' ' !'
* '3' @7I'>A7'C7[7A'>'@>@'M7447A'4@>C'4@7=' 4@>4'P74B R'
% ' : #' ' KK33' 7[7A'>'FC7' F''4@7=' M('
7L7A'Q@3?67A7<'@7A'6A744I'&3447?'7?BA74?'4F'=7
&I& F, F*&77'6'(#,'%' 7+ ' '* ' (#,'
)'F*&&7' Z $'9 U %'!*'5.\
(@7'QFA<'M73CV'F''CFA@7AC'>C<' B'FA3V3C'4@7'FA='0G '
?'A7Y'7=6&FI7<'7L7C'MI'?FU4@7AC'Q3347A?
' 6' #& *%'#&=&' &+' (#,''"+ #&=&'7"B&7)'
! ' ,*&77'(' / ,F$ E# !%'#/' * !%7&++',"+?
& :!(.7& & + #
-*" '0# &';%* 5 *' F=7'@>[7'>'@>C4&>'7U4?'
I7'>A7' FC&!'>' C7[7A.<F.Q7&&' % *' : '0 =+' K&L333'
C&!'?F=7'<AUC87C'C7[7A.<F.Q77&'3C<3CV'@3?'Q>I'@F=7'
%+' ' ' ' ' ' ' ')% ' % '&' L'%'Q7C4'4F'?7>O'
4@7'A7'UV7'F''>&&'4@7'C7 7A.<F.Q7&&?' % '0 $ '
*)' '&347A>A!'C7[7A.<F.Q77&'<7?43C7<C7L7A'4F'>B@37L7'?F4AUC7
:'%!8' &=&' ,"#/(#)'/ ,'/ ,F$ F# ?
!%'#/' !%7&++
>'%** '8 z & 0BQ' 8?';K FF5'% ' 7[7A.'
<F(Q7<'@FA?7'BFU67A?' K 4 ' ' ' ' ! 'KL333' UA'
>U&<'C7[7A.<F.Q77&'<77L3&[?.MUB837'F[>'=34@7A' % *' 4 '
< ' 'C *' '33'% ' C7'F''4@F?7'C7[7A.<F.Q7&&'&><?'
Q@F'?77=' 4F'@>L7'>'83C<'F''=>VC743B'6FQ7A'FA'=3?'FA4UC7?'
PH'C %% ' C ! ' C !% ' ' 3K' % ,' ' ?>UBI'
4366&3CV'C7[7A.<F.Q7&&'7&&FQ
&#'&' &I& F, F*&77'+%'% ' &I& F, F*&77'+8'
)++;'C '4 ' ' / ' * ' K333'3VF' C&!'
4@7'AFQ<I3?@' >C<' C7-7A.<F.Q/7&3?@'(+(6+' @ % ' % 'F'9'
UV' 0%' AUC87CC7??'C7[7A.<F.Q7&&3?=' P74B-R-

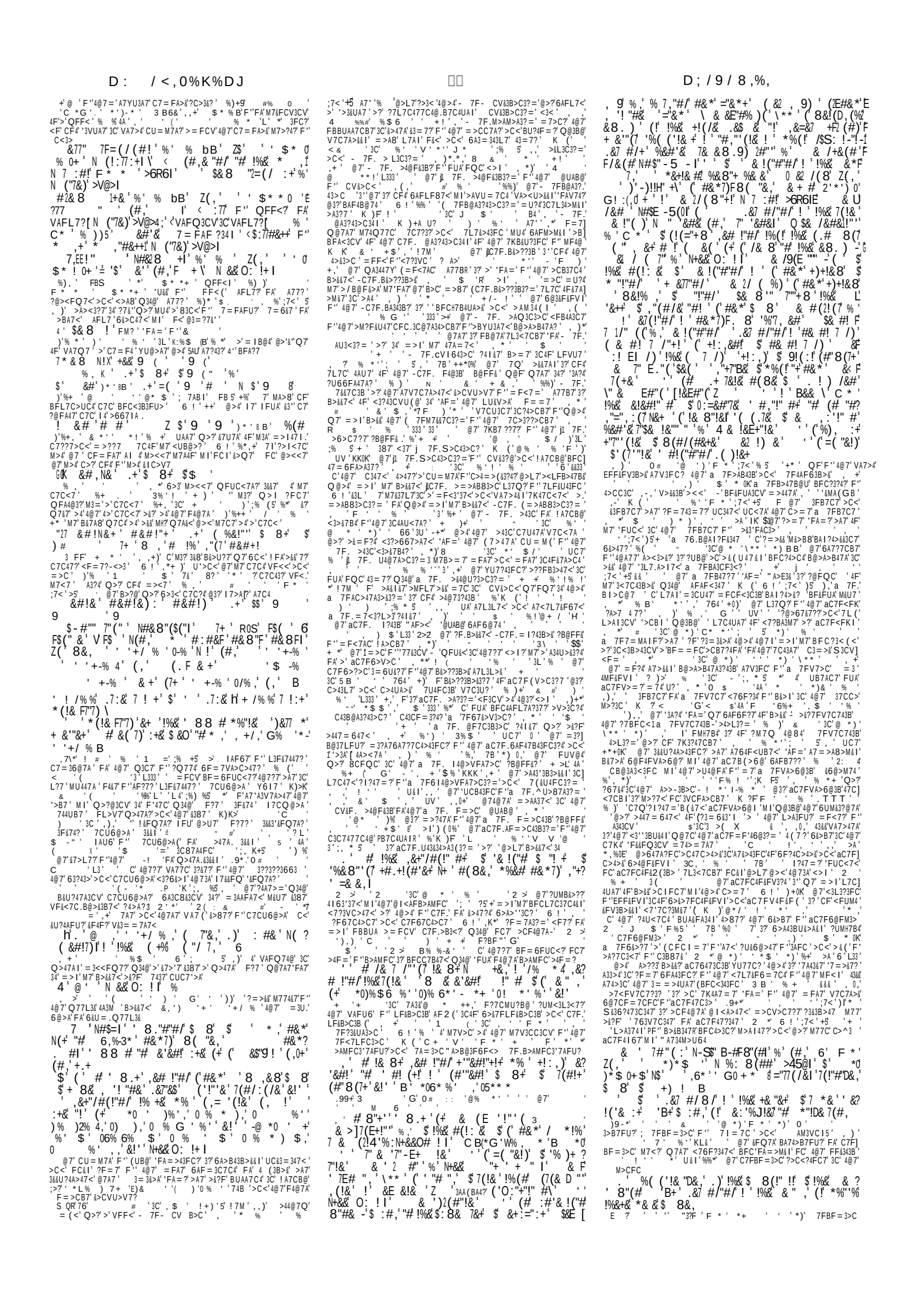
. ;_
&& &'F#&,+'#&& %(#,' .+'$$'9 "'&!'
&&+' .+'$ 8' $'9 "'# +&'9
&&+&'=("(#!' $'9 '=' 9 '# +&
&&+!'=("(#!' $'#&"+!'9 '' .+'$ 8' $'9
&&!' .+'$'9 '+. '9 0 ,"(7'$
&&!%: 'F) ' .+'$ 8+' $'9 "
&&=&'=("(#!' $'9 , '$"+!
&&*&' .+'$ 8' $'9 *
&&)#/' .+'$ 8' $'9
&&D&' N#7DI' ' *' ' ! %' (#,')>'
8+Ÿ ;F6 #&+&'6#"&+&')'#&)+'#)+&'6F3
#&&+&'NV #&&+I' 6F #&&D&' Z ' 'B ' '
(, ' '8! %'N *'!8*%' ', %' *', %' ('
' ,4^' ' * %' N ' ' '4' ' '
' , ' ' :', '"N :' 5 '4' .' $"8"!(?
!"=&' "/"#Ÿ'$' J "' ! ! +#&&D&
(% + '*-' %' ; 87>45'%*,' >C' BFQ34@' >C<' C7?4&'
* 2) '4A' ! ' ' ; F&&?5' ' ' =>C' C7?ICV7' * >
C&' ' 6%' 'B' L3H' @7C' I7' ?7' IFQA7' @>Q87' 7?ICV'
>C<' >?4ICV' Q>4' 4@FAFV@' @7A' F?4A7&&3?')7--'
$' -';%@ (' 'L33H'M' 7'=U?4' 6U4'3C'4@7'CF??'F''@7'
6>B37C4'6FU<7A'F''67&&34FA'F'' 6=C'4F'=>87'@3='4F'C7?7'
%()' !: ' % '' % 'KKL333';%))5'+' "I' 7>43CV' F''
U?4>A<' 'Q7'>A7'?4A>3V@>Q>I '6AFLF87<'4F'C7??7')//7
" + '@ */ ')' @7C'>CI'FC7'C77E7<'4@7I'QFU&<'
L7C7A>47'4@7'CF3?7'>?'>'83C<' F''7K6A7???FC'F''4@7' 73&I'3C.'
?@A3C7<'3C'4@7'M7><')6.7 #' % ' ' '?L' '
FA??'Q@F?7' 7>^M73CV?4F66[< ?F4@>4'@7'B>CCF4'
C77E7' ' '4 ' ' * & %% + ')9.7 :
' 'F * ' *)'3C'CFA4@7AC'<3>&'V&F??>A3?7'?>&?F' @7?@'
>C<' @AF6?@-5' ' 3 ' ! ')+' 'Q>'"'A>7'
4@7'<FFA'V>A?'@7A'[C77E7
&#'&'7" &&D&' ':'+#&&D&' %
>>/ \% %'B ' C ' ' % ' ' ' ' ' ' '

!7 &/ "#& ' 6' 6 ' % m B MM 9 " F'
. ' R' ' C7VA7??
OP^ ' $ ' *,B '3' % I3CV 6AF= 3?BUFU?&I' Q34@'
4@73A' 7VA3C7?'>C<' F4@7A' @7.?&>L7?
$, / "#& N# / ("#I ' %' % ' Z$' 9 # ' H'
F $^ &+&8 .7"#/ !%(!' $'##&/ &+
% (' * * ' ' + % @7' FA4UVU7(' Q@F' &3L3CV'
Q34@4C' 4@7'4AF63B?'@>L7'M&>B87C7<' 4F'>'C7VA3U7'<I7
!' &2 - +% (' 6 % B= Z$ 'H'F' 7 \'
+&,' .)' !%& ##&/ &+
-* ' -' : ' F + ' %' %+ ' % %'B' 4@7' 7VA3?@'
FA<' = A'>'6>3A'F'" '7&#FQ?
K &/ "! ' 2'B 3 %4' Z(' ' ,"8' $
3 B' ' 8&8.& $'(',"8"#:!"=&##&/ " '
('& &9'+!"#/' "# !%& (7() F 7)##&+"(# &/" #'
&+ ' #& $'!%& &!(+'"# !%& %"7" "#& +7(#,+
% + ' @ ' ' ,') ' 0%' @'7' 7VA34F?'Q7A7'6AFM>M&I'
4@7'>MFA3V3C7?' F'' 4@7' 3?&>C<?' %) '0& :' @ ' ' $
K333' ;%) 5'++ ' @7' ?&>C<?' F''4@7' >B3'3B' BFC4>3C' 4QF' L7AI'
<3?43CB4' A>B7?' F'' = 7C O4@7' 7VA34F' >C<' 4@7' F&I C7??>C'
% ' ! ''U 3C % ' ' UV' *' @7' 7VA34F? >A7'
>'<3= 3CU43L7' M&>B8' A>B7' Q34@' QFF&&I'@Q '>C<' UC<FUM47<&I'
F'' >6U>C' FA3V3C
. ' # (!! ". :!"=& ' &,"' (!"=& :+&
% + ' 0 '3C' @ *7)'@& *V' *) ' *' @7' >CVU>V7?'
F''4@7' >6U>C' FA' 7VA34F' A>B7' 6 ! B' @7' >=>CV?' F''4@7'
3C47A3FA' >A7' 7VA34F ' %)+' %$ 6 ((') ,) ' ') 0, ' '
<7?BA3643FC' F ''>' 7VA34F' C>43L7' F'' AAF = >CVF
&/$7 - ' N#- /#LI' 7+ ')F #&/ &' Z(' ' '
/ ' ' bB B' ' +$B ' ' .7('B' '$' 9 ' '
&#' & (7+ ' 6 ' +&& 9 ' (#, ' 9 I
' $' #"#,"=", : (7 N& + ' (' 8 (7&I' .&7 #/"#/' ! '!%&
$ "' (# ('& $' 8 (#B"#, ' *%" '% +' ,"+!"#/ :"+%&, '
.)' (' .7('B +B"#' .7('B * 77)' %(" ' (!' # +& (#, '
!%"'B' ! :, "#/' 7" +
3 '8 ')%! '2 ' @7 I'>A7' CF4' >BBU?4F = 7<' 4F' 7>47'
?UB@' = 7>47?' >?' <FF' 4@7' 4@3F63>C?' FA' 7VAF?'
8 " ' % ' *''B' ' * ' C'>& 3C7>'4@7'M&>B87'
67F6&7' B>&47<' 7VAF?' <F7' U?7' 'FA' = FC7I B7A4>I C7' &3444&7'
?C>I&7?' %)% ' & @ $ % ' # ' KL3' * ' @7A7' 3?'
>= FCV?4' 4@7 = '>C' >C<' F'' 7VAF ?' 3C@>M347<' Q34@' M&>B87'
67F6&7' %)*#' ' & % % ' 3?' <7??3'VC' M73CV'
?4A>CV7&I' <3?BFL7A7<' MI'>' 7VAF7' %*K)' ') % ,'
22' UC7' ' 7??>I < 4F' 6A7L7C4' C<3>C?'>C<' 7VAF?' M73CV'
>47<' L<4@' FA??(' >C<' FV?' %* >' #' * +/ '
' ' 2 2' 3?' BF>4' F'' = >3 ' = >7' @3?' ?83C' >?' M&>B8'
>?' 'C7VAF7' % * ' 4 &'\@&' $ ' 2 ' F'
= 7>C' 47?43 = FC I'4F' 4M7' 3C47&&7B4U>&' >C<' = FA>&' B>6>M3&3437?' F''
C7VAF7?')+' < : ' ' ' J ** ! 'KK33'B *C * ' ?
@7'B>= 7' C7>A' '?>Q' @7' Q>?'>' C7VAF
H' ' *' G% '%' ' ,' ! '(!!&8 !' (#'"8 ++".7&
!(+B' 6 '%
>+ ' 4 'G' : : ' *% ' 'F '3' ' ?' 8?'
% * ' '$ %+*?$' Q>?@'>' 7VAF ' FF?3CV'MF4@6>3C7?>C<'BF?4'
4'"%)**' s' $' ;%))5 '+,' @7A7'FA7' Q>?' @7' 6U'A-'
4F' Q>47A' <AI' ?43B8?' >C<' 4F' 3C>?@' 7VAF?# 4@>4' 3? '4'F'
A7'FA=' >' = F?4' 67AL7A?7' >C<' ?4UMMFAC' V7C7A>43FC
' ' % ' -' "# =(" :+ :+&+' N+&& O: !+ I
+>>>' ' ' % 66,' ' ' &?F'>' 83C<' F'' '3?@'
B>&&7<' 7VAF7?' FA' 7>. 7L3&?' Q@3B@' >A7' &>AV7' >C<' @>L7' >'
M&>B8' ?B>&7') '8 # ' ! ' ' ' ! %' @' ' @7' FU4]
Q>A<' 83C' Q>?' >' 67A'7B4' 7VAF ' 4@7' " FC7?' >&?F' M73CV' >?
M&>B8' >?' 74 ' * #' '),) ' C ' ;7<' 5 ' * 2 ' 'Q@347'
83<C7I.M7>C 'H' M&>B8'C7VAF7'F ''4@7'?>= 7# ?B>A&74'F''4@7'?>= 7 '
+ +>' 5 #' G' "' ' * $ * 'KL33' B + C ' 2 @7'?>CVU3C7'
>C4?' >4' &7CV4@' AU?@' U6FC' 4@7' C7VAF7?' PM&>B8' >C4?R' (C '
4 ' ,) ') ' 2 ' * 53 ! ' 6AFL3CB3>&
C>= 7?' F''4@7' B>47A63&&>A?' F''4@7' 4UAC36' ?>Q. (
' %&' #/7"+% + B&# .)' 8& "'(# #&/ &+'
% +' % ' ' $ ' @ * ' *) ' 66 ' ' UB@
6>A>?I C743B' 'FA=?' >?' / % 0 % ' 'FA' % / % % + ' '>A7'
BF=. = FC' 7CFUV@' 3C' 7VAF
4 ' * $6' N'%'&$7) .0&'!"=&!' (+' ' *0%+) * ' '
E! % ,'0! '0! ' '0 * ! 0 +' '0*G' !'
(,0 '0G // ' '0G* /
% (' 2 ' % ' % ' % @3?' = U?4UF4' M7' 4>87C' >?'
>C' 3C<3B>43FC' 4@>4' -C7VAF' >UB43FC?' >A7' CF4' F'' 'A7YU7C4'
FBBUAA7CB7' % * ' ! '* 764'+0%' 7'4FFB' @3=
4F' FC7' F''4@7' -C7VAF.<7>&7A?'Q@F' '><L>CB7<'73V@41'6FUC<?'
( ) '2 ' % ' % B' ' @7' C7VAF.<7>&7A?' @><' BFC]
'3<'7C43>&' ?7AL>C4?' >&Q>1?' 3C' >447C<>CB7' %**%'
+ $ / ' ';3 3:5')*$$' @>L7' 8CFQC' >' -C7VAF.<A3L7A' 'AF='
> = (B > ' 6>I ?3KQ.'3L7' VU3C7>?' %* %' 4 ' G'
*) ' 'G$> /' ' ' @7' UCA7&7C43CV' 'AFQC' F''>' C7VAF.<A3L7A'
% *' < ' ' " ' + ! ' ;% 5' KL3' ' @7?7'
= U?4' M7' F&<' C7VAF.<A3L7A?' % ,)' ' % /' 3C' *)& % '
;% 5' ' ,' @7' 4AU7' -C7VAF.<A3L3CV' 6A3CB3&7' F'' ?7&'.'
3C47A7 4' % %*' J & ' &' @7' 76U437?3'
F'' 4@7' (7VAF.@F&<7A?' F'' 4M7' UV>A.VAFQ7A?' P74B R' % *'
< ' ' ' - ' + ! ' ;3 ? 5' KL3' ' 7'>A7' 4F' M7'
FL7AQ@7&= 7<' Q34@'>C'>L>&>CB@7'F''-C7VAF.@UC47A?' * '
<' " J 'B' C %)&'% +' @7' -C7VAF.FQC7<' &>C<?'
>A7' CF4' CFQ' = UB@' 3CBA7>?3CV' % + ' P & ' * 'L' %K '
FU C<' 4@>4' IFUA' <FV?' <F' CF4' Q>C4' 4@3?' UC=7AB3'UE'
nC7VAF.Q@3663CV' + >' + ' % ' ! ' G ' UV' % ,0,'
@7' <>= C>M&7' @7A7?I' F''1nC7VAF.QFA?@3&'[
. ' # &/ 1+' %&(, ' !%& = ' (78
)*' ! # ' , %';7<' 2" ' 7?B7C<7<'3= = 7<3>47&I''AF='
4@7' 7C3U?' F'' 4@7' F1&?' >C<' ;>?' 4@7' 7VAF?. 7>'<?' 3C'
' ''>AM><F?5' 7L7C' Q34@FU4' 77<?' % +)' O #'
? ' ! ' % ' @7' C>43L7?' F'' F&U = M3>' B>&&' 34' >VU>' F&'
>M7E>'<7' 7VAF' ; 7VAF ?' @7>5<5' 3C' >&&U?3FC' Q7' 6A7?U = 7'
4F' 4@7' '3VUA7' F''4@7' CU4
$ ' ' N && O: ! I' 6 ' % m^B
%*)' F * ' ' + ' * ' + ' * ' % ! ' MAFQC'
&F>L7?',<7&3L7A7<' 4F' 4@7' ?@36?' 3C' FA<3C>A I
' % 6 ' N (++"#/' "#! ' % ! 8 4
A ' "!% #(8&+ $ & + #+\' &7 #/"#/' ! ' !%&
('& $ #&/ &+' .7('B] +B"##&, ' 7+ ' ' *'
$ ' ' N+&& O(!+' >46;' (#, ' >4V>I
% +' $' +% ! ' 3% $ ' ' ' J ' %)' ' C7VAF

QF = >C' + 6' & '@ $ ' , ' , ' <76>A47<' '
Q34@' 4QF' 7VAF' "FI7?' 4@>4' '@><' %)) ' : ') * '
*,' 7VAF' F = 7C' MA3CV3CV' 'FA4@' 4>QCI'@3<7<' U&>4F?'
%()' % ' ! ' F%5' F' ,%**0+' M&>B8' 7VAF' >C' >MFU4' '
I7>A?' F''>V7' +' ' 8 ' + * ' ; &FM75 *' ' MFUV@4'
= 7'>' 7VAF' &>L7' > ' *' ' 3C' ' ' ' %+ ' 'C7VAF7'
= >C ' >44>B87<' >' C7VAF7' Q7CB@ >C<' QFU&<' @>L7' 83&&7<' >'
C7VAF7' MFI ')6++' 3C' @ ' ' %) '
M7' 7VAF' QF = 7C' F'' 4@7' >C<3CVF' >C<' MMF' C>43FC?'
)9*6' ' 4 &' *)' $ ' ' *2 F7?' 34' C7L7A'
7C47A' 4@7' @7>< ?' F ''C7VAF' @U?M>C<?' >C<' '>4@7A?' 4F' A74>&3>47'Z
)979' ! N4 $ ' * ') ' @ %' ' 3' % ' @7' C7VAF
QF = 7C' QFA83CV' 3C' 4@7' @F4' BF44FC'6&>C4>43FC?' >*' %$ [
6 . ') ,) ' , = ') 0%' C' = F?4' B>7??' 4@7' 7 = 7 = M7A?' F''4@7'
C7VAF' = 3C?4A7&' 4AFU67?'>A7' FC&I'C7VAF7?' 3C' C>= 7 ' Q34@' >B7?
>C<' @>C<?' M&>B87C7<') 96)' ' P ' $)%' $ ' %%)'
@7' 7VAF. = 3C?4A7&' 37' 4@7' >A43?4' Q@F' M&>B87C?' @3?' '>B7'
><F64?' 4@7' M&>B8' = >C[?' = >CC7A' >C<' 3C?4AU = 7C4 ' >C<' A7B347?'
@3?' '37&<' >C<' 6&>C4>43FC' ?FCV?'
. % ' 8' $"'#+&'!+
% K)' N -' Y' ' ' * $ * ' KL33 ';K 3 5' $$ ' @3A4I'F''4@7'
AU'7?B7C<>C4? Q34@' 4@7' ><<343FC' F'' ?7L7A>&' C7VAF' 6U6>'
>*' '% + $' KF 7B' * ' ' A7 = >A8>M&7' C7VAF'L>A374I' F''
'6 ,%3% ' * + %, %
#+"!"#/ ' ' 8 +&,' $'#&/ &+
> ' (' 33?' C * $ (' , * % ' e*' " [?' 8?' % * '
' + ' CVA>47'U&&' 7VAF.83C<7' 2 *2 '
' % ' ' @7' 7&>V3>C' 7VAF' A>B7?' @>L7' M77C' ?U6]
6F?7<' 4F' A7>B@' 7>?4Q>A<' >?' '>A' >?' '4@7' ! 7H77' ?&>C<?'
% + .(' * ! ! (' ,) ' ' % ' ' % 0,' @7' &>CVU>V7?' F''
4@7' 7VAF' C>43FC?' 2 'J ~' % % '3L' ' @7' 7VAF'
4A3M7?' @>L7' C7L7A'7K47C7<7<' CFA4@' F''4@7' >@>A>
6' #%(.'!&,' ' ''': "&,' .)' #&/ &+
%*, ' J ~' %/ ' ' * ''L' ;% + 5' ' 7' = 74' Q34@' >'
&344&7' C7VAF' 4FQC' %* +' G' * &' F%5' % ..' >A' 3C3'
@F = >?' O O<' 8776?' >4' ?F = 7' 3&7?' <3?4>CB7' 'AF = ' 3?'
<Q7&&3CV' FU?7' 7VAF.^U>A47A?' ;>?' 4@7I'>A7'B>&&7<5' %*>'
4 ' ' F * '$$'), ' @7' UAF67>C'C>43FC?' P@>L7R'
7CBFUA>V7<' 3C' 4@7' 7VAF7' BFUC4A37?' Q>A?' A>63C7' >C<'
= UA<7A' % +%' O ' %6' ' '),' @7' ?&>L7?F' 4@7'
A>M?' >A7' = F?4&I''AF=' MI??3C3'>C<' 4@7' 7VAF' BFUC4A37?'
, + . ' * ! ' ,) ' ' % ' ' % ,0,' 7A7'4F7'4AU7' 7VAF'
>A7>' 3?' 7KB77<3CV&I'?=>&&
6' $' .&7 #/"#/' ! ' ' ##&'I&,' *"!%' '%(' ('?
!& "+!"' $' &!' ' (' ##&/ &+
+>>>' : ' , % $ %)&' % @7'3CB&F??<' ?@7&' PF"'4@7'
BFBF>.CU4R' Q@F?7' 7VAF.?8U&&' 3?' CF4' 7>?3&I' MAF87' ,6-;'
1 A' $ ' ' ' 2 UM?BA3643FC?' 'FA' ' 7VAF7' B@FF&' 3C'
7C?3&L>C3>' %' S3S' ' 0 $ ' ' ' J ' ! ' ;% +5)+'
@7'@7A = 34>V7.&3B7>667>A>CB7'F''4@7'C7VAF'MU3&<3CV?' 6 !'
' F' M7' FUC<' 3C' >&= F?4' 7L7AI' C7VAF' V>A<7C' 4@AFUV@FU4'
4@7' 3?&>C< ' *) Z ' ! ! ') ' ' % ' ' % @7'
4AU7' 7VAF'4I67'F''BFC'FA=>43FC?' 6 !' @7'6AF67A' 7VAF'
B@>A>B47A' >*' %$ 6 (' '),) ' O', ' > +' @7' ?7C43]
= 7C4'F' 4@7?7?' C7VAF' = 7&F<3??' 0(K 0 @3?'C7VAF' = 3C?4A7&?I'
CFQ'BF = 6A7@7C<?' &>AV7' L>A374I' F'' ?FCV?' .9/6 # '
% * (' J * !06&' ' F = 7' F'' 4@7' &>AV7A' ?YU>A7.?47 = 7<'
C7VAF.MF>4?'>A7' >&?F'4@U?'<7?3VC>47<
>' # + &''(7 :+&+' (+ #&/ ' (#! ' (' .7('B"+% (#!'
0"&/ ' .(!' (' : &(# (#, ' +"(!"' .(!' K / 0
-+ *' $ %+ + 4 $ (' .7('B" + !)F. *'# ' 7 : '
#&/ ' '('%&9)' N+&& O: ! I' #&/ ' '7 !%' '7 !%
"#!&#,&,' ! ' .& * # .)' #&/ &+' #&/ ' $"$&&'
!%&# +&&,+' $ % %'*)) ! ' % >' #&/ ' # N+&&
O: ! I' #&/ ' , / ' (' , !' :+-' '# %:#!"#/ :#?
(*()' #&/ ' +7(=&+' #&/ ' $&7!' N'$' ' *') * 4'
#&/ '%+%'$7) $ *7'N+&&O: !+I' #&/ '7&!%(/)'
N+&& @ ' 6' >I' #&/ ' 8 #B&)' (' .7('B
8 #B&)' $!%& (7()' &#"#+:7(' Q(=(' &!' K a0
'*/)+' $ %+ + 4' (7+ ' '(77&, !%&' ' *' %' + =
#&/ ' "7' N+&& O: ! I' #&/ ' &('%' N+&& .
6D' 5 (I' #&/ ' & &' N+&& . ' 6' 5 I'
#&/ ' !NLI' #&/ ' !(8 ("# (!(8 ("# 8 #B&)'
2 !%' V +%4 $!%& 7 *&' 8 (D #' #&/
)(8 '!%& &+!' #,"( )(8 ' *)* %' % %'N(7+ '
'(77&, ' *0)*+' ,' ,%' 4
+ +>' 5 #' U' ' * $ * ' KL3 ' ;% % 5' ' %' FM?7AL7<'
4@7' &344&7'-C7VAF'>C4' '-+ ! 4'7CV>V7<' 3C' 4M7'?>= 7'7 = 6&FI]
= 7C4'U6FC'>C'7&<7A' % ' F= = ' / / ' >' *0)%) 3,'
>' 6AF67C?34I' 'FA' 7>43CV' <3A4' 67BU&3>A' 4F' 4@7' C>43L7?' F''4@7'
7?4' C<37?' >C<' %3B>' ,*) C* *' ' L ' HF' UV'
, 0,'- 7VAF' B&F4@' BF = = FC&I' B>&&7<' Q@347' >C<' BF&FUA?'
6I>3C?' E (' 2 * ' % ' ,*' >C<' ' QFA7'
B&F4@3CV' F'' BF>A?7'VA>I' :-C7VAF.B&F4@-' 4@>4' >667>A7<' >?' 3''
= >< 7' M1' BFC4A>B4' , * 4 #' * ' ' J ' -(' '
n 7V3F' F''77' 6 /+%' ' !7<3VF?7'?77<?' F'' 7447'
% ! ' > *0)* ' ' >' 7?4' C<3>C'
C>= 7' FA' 4M7' UA8?@= 3&&74' FA' <@UA>' % ')' 2O
% ' % ' K)3' '@>L7'?3CB7'?77C' >' 6>B8' F'' -C7VAF.<FV?'
B@>3C7<' 3C' BFU6&7?' @7I'Q7A7'>&&F''>'MA77<'>C<'3C'>667>A]
>CB7' M74Q77C' >' BF#B@' ?4>V.@FUC<'>C<' >' 'FK.@FUC<' % *'
< ' ' ' ' + ! ' ;% 5' 'KL3' ' 7C<3CV' 'FA'
6>B8?' F''C7VAF' <FV?' 'AF=' A&7>C?' % +)' 4_c & '
)) ' C ' $ / ' ;% +5 ' *) ' FF\' 7&4? @>L7' CFQ'
=>47A3>&&I' <7BA7>??<' 4@7' >A43B&7' 47A = 7<' - C7VAF' '7&4?-'
M73CV' >&= F?4' 7K43CB4' % * 4 ' 3C' @ K ' % ' '
' %)@' % $ % ' % / + ')) + % % ' @7' n 7VAF'
!3?@' % ' 2 ' + / ! >' *'- ' ;'4@7' @ % ' * % '>'
<3647AFU?' 3C?7B4'?F' C>= 7<' 'AF=' 34?' ?@3C3CV' M&>B8' BF&FUA'
4'37>3<?F' B>&&7<4@7'>% * 0-, ' ' ' ' ' ! ! ' ,) ' % '
' , * 0%' @7' 3&8'FA'- 7VAF.'FQ&F'4@7' >67'<7' 7A<'3?&>C<?'
K--%' * * ' 7 = = 3CB85' , + ' ' ' $ ' $ '
@*+ ' ! ' ;% 5 % @7' I?3&8I' >C<' -C7VAF' ['FQ&?
Q34@' ?83C' BF=M?' >C<' MFC7? Q@3B@' >A7' M&>B8' + '
, ! ' *) ' 3 ' - 7VAF' &74@>AVI ' FA' 4@7' ?&7763CV' ?3B8]
C7??' F'' 4M7' <FCVF' , ' ! '6' '),) ' ' + %0&
n 7(F' FC8(' FCV.4>3&7<' M&>B83?@' Q34@' ' M&>B83?@'
M7>&<' * ' ') +// ' 66 > *0* ' >'
C>= 7' MI' Q@3B@' @7 6>&=>'F'' MF4>C3?4?' 3?' ?F = 743 = 7?' B>&&7<'
, + ' ' * ' FA' * / % ''/ / ' 4@7' 6&>C4'
CFC>' &4@3F63B>' &0&0' 8 ' '0 $ ' ' J ' ! ' ;% +5
*' @7I' MF3&7<' >' -C7VAF.6F4' 'FA' @3=' 'MU4' @7' Q>?' 4FF' 3&&
4F' ?Q>&&FQ>' >' = FA?7&' + +' @ *)' \ ** ' *)' % ' - 7VAF

P ; K < / _ ! , H
>= >A3C?' , ')' ' J ~ ' % ' !06&' @ $ % ' ' , +
C' >A>' 4@7' 9 ' >= >A3C' 3?' F'47C' ?77C' 3C' (' 4> = 7' ?4>47'
, ' , ! ' *) ' 3 ' - 7VAF' I >=
&#' & &$' 9 '",&' !%& B"77"#/' $ (' #&/ ' &E'
/ , 8 ' !%& &/" # ' ' 88:#"!)' $' #&/ &+'
&E/9 -' ' % ' ! ' 8(B& "#! ' ' (+' .7('B (+'
(' #&/ ' &2/= % , #&/ ' ('& '+! 'B'
/ "+%' % ' '%((' !& "+!"' $'!%& #&/ ' &2/ "!& '
(' #&/ %"7' &E/ "D&,' % ' /"=&## =& ' ! ' !%&
#&/ &+' &/ 7(!) ' &9'&++"=& (, 8" (!" # $
!%& #&/ ' &1/ 7&! ' &E/ 7" : / ' (' 7"!!7&#&/ '
&/ 8 (E#" (' &9! (= - (#! #&/ %"7"+8 ' %&#'&
g &/ 8 (2 ""(
, ' ' / *! 'L';% 5 ']V' 4' = U?4' @>L7'M77C' BFC]
?3<7A7<' >' B>?7' F''HU?43'3>M&7' NC7VAFB3<7' ,) ' + '
3C' "A3<V7'@ ') *) ';% 5 %* ' ' FUV@4' 4F' 4@>C8' I FU'
'FA' >'?@><7<' = >6' F'' 1C7VAF<F = 'Q@3B@' IFU' ?7C4' = 7' >' &344&7'
Q@3&7' >VF ' ,)+' 9 '+ ' % ' $ ' - ' ' , + ' &&
7VAF<F = ' @>?' 6U4' FC' 34?' QFC<7A'U&' >443A7' F'' '3C7A!' , * '
! ' * ' !) / '333' ''CF' 83C<4I' B&FU<' Q3&&' 6>A>?F&'
= 7 ' $' ?@>&&' M7' -C7VAF'37<' ,) '2 ' % ,' * 'B
! ' % ' @7' ?= >&&' ?744&7 = 7C4' F'' -(C7VAF.MFF<' Q@3B@' 3?'
?76>A>47<' 'AF = ' FUA' @FU?7' MI' >' QFF<7C' 6>&3?><7' ') , ' '
$ / 'C % ' 3C' @ * 7' ?7C43 = 7C4>&' ?FCV?' @><' CF4@3CV'
67BU&3>A&I' nC7VAF3?@' >MFU4' 4@7 = ' , % ' ' (" *@
$ % ' % ' + ' @7' n 7VAF347?' @>L7' M77C' 3VCF = 3C3FU?&I' <A3L7C'
'AF = ' 4@73A' ?4AFCV@<<?' 9444' *) ' : 5' , UV ' @7'
FC&I' 6>A4I' 4@>4' ?4>C<?' M74Q77C' 4@7' 67F6&7' >C<' >' -C7VAF.'
3E7<' VFL7AC = 7C4' ,) ' 2 3C' $ ' , >C ' @7' '
FC?7AL>43L7' = >???' Q@3B@' 7 M74Q77C' -C7VAF&>4Q' FA'
C3VV47AQFA?M36' >C<' 7B??3FC' , * ' , / ' &)
C & ' @7A7' B>= 7' U6' >' ?=>&&' H74.M&>B8' -C7VAF&74' 73V@&
I7>A?' F''>V7' 9446' ' ! ' %6 ' ;>MA' 7<' 5 $
*%' = I'F>A&3CV' ' = I' nC7VAF&3CV' ' ' ' ("
K 4' N 7VAF. = >C4>' K (' ' ! ' ' % *' ' 'K F
%' FA7?77' 4 @ / K' BF = 6U&?FA I' &>MFUA' Q@3B@' 4@7' nC7VAF.'
= >C3>B' Q3&&' @>L7' MAFUV@4' U6FC' @3?' 'A3B>C' 6AF4)V)
&/ F%&(, ' 7+ ' #&/ %&(,
$ 7 ' ' #&+!' $'! &!F(#!+' 6 % (bB
%* %!(('3C'@ ' % ' ' ' 3)3' $X ' @7'
BF&FUA' F'' 4@7?7' C7?4? '3?' M&>B8' AF = ' Q@3B@' >C<' 4@73A' 3A]
A7VU&>A' ?UA'>B7' >C<' FAM3BU&>A' ?@>67 ' 4@7I@>L7' M77C' B>&&7<
7VAF' 7>< ?' MI' FUA' '3A?4' QA347A?' FC' 4@7' >AA3MM77' ?&>C<?
4' +! #/ 7:/!' $(.('' 7(.('B' 7 :
! ' J (' !@%/ '*'' *6%))*' #6' ''7Q' 3AFC' C7AL7<'
?=F87A?' FBB>?3FC>&&I'>87'>'63&7' F''C7VAF@7>< ' % % % %'
F ' 3 6 ' ' ' >L7C<3?@ ' C7VAF' @7>< ' >C<' F4@7A' 'FA=?'
F'' 4FM>BBF' 9469' # ' ') 3/) ' K&' ' @>C<' U&' F''
&FF?7' 4FM>BBF' F''4@7' 83C<'4@>4' 3?' B>&&7<' 7VAF.M7><
% 6') 979' % ! ' * % !0 *6%))*'
4FM>BBF' ?F'47C7<' Q34@' = F&>???' FA' ?IAU6' >C<' 6A7???<' 3C4F' 0'
B>87?' V7C7A>&&I' B>&&7<' >L7C<3?@' K ?' ' C%
F *+' ! ' @7' U<?FC?' ' >'I'C7VAF@7<' >C<'I'C7VAF@?<' ?AFM>BBF
5' #"#&& " O: (7!') $"#,"(F : . &
9449' '),) 'C ' &&& ')0,' @7' ?BA>63CV?' '3F = ' 4@7'
4A77 >A7' = 3K7<. Q34@' 4@7' A7?3<CE3M>F&' 'F' 4@7' BF&4B43CV' 6F4?'
>C<' >A7' = ><7' U6' 3C4F' &>AV7' AFUC<7<' M>&4?' Q@3B@' 'FA = ' 4@7'
3C' 7A3FA' BF = = 7AB3>&' YU>&34I' B>&&7<' C7VAF@7>< ' , % <
G ' +' 6A' ,0%' @7' 6AF6FA43FC?' F''1'3C7'[>C<'1C7VAF@7>< '[
AUMM7A?' <767C<' FC'4@7'>66&3>CB7?' >3'&' B>A7' F''4M7' BF&&7B4FA?
* %!'C) ' !%& :+! (7"(# &=& / &&#
8) !7& .&&'%' % + ' +' ' ' %$
B ' ' V -' % B' @ ' +' 7V4F.@7>< ' 77B@ '
M'>' >A<' A3B@&I.BF&FUA7<' 'UAC34UA7'QFF<' >C<'4@7'Q>A4I'6AF]
4UM7A>CB7?' FC' 4@7' 4AUC8 ' >''FA<' >' = F?4' M7>U43' U&' '3VUA7 '
&/ ' ;C ' VAF&<5 ' % '>C<' ' P ' % <
'%!8' $'(' #&/ '!) &' &+&8 .7"#/ !%&#&/ &+'
%(=" #/' + 8& $!%&" '%((' !& "+!"' $&(!: &+
' ! ' ' ' - 00'3C' B $ 'F * ' *) ' '
,)' @7I' >A7' U?U>&&I' F ''>' <>A8' /763>' MAFQC 'Q34@' C7VAF3<'
'7>4UA7?' % *#\' * ' ' J * !' -=== , , 5' !&447C7<'
&36?' >C<' B7A4>3C' C7VAF3<' 67BU&3>A3437?' 3C' @3?' &3 = M?' (
! ' % ' ' -) %' +,' 4I67' F'' = >C' Q@3B@' 3?'
?3>43B' FA' 7 = 343B' A>4@7'A'4@>C' C7VAF3<'
' 6' ' & + # $ (' #&/ ' !) &
' ' ! ' ' % &' * ! ' L ' %K ' @FUV@' 4@7I'
Q7A7' 4AU4I' C7VAF3<>&' 3C' @>3A' >C<' BF&FUA' 9449' ' ' $ '
/ ' ' 33' ' F = 7&I' 4@3F63>C?' BU&&7<' FU4' F'' 4@7' &7??'
C7VAF3<>&' 4I67?' F'' 'A3B>C' &3L7' VFF<?
& / "+ 8 ' N#$F/# -'"D2 8I' Z$' 9 " 'F' I
$' ,=(#'&8&#!' $'#&/ '"#!& &+!+' "/!%!+
(, ' '< =BBC = *0$%' % ' + ' @F<>A7'?>I'>C I4@3CV'
3C' '>LFA' F'' 7VAF3?=' >'47A' @>L3CV' A7>< ' 4@7 = Z' K)K' %'
' +' >I' + +' A3V3C>47<' 4@7' <7>' F'' :'A77' C7VAF3?=' 1
>C<'?4>A47<'>' BAU?><7' 3C' '>LFUA' F''3C'7A3FA'A>B7?
4' '#&/ ' #:#'"(!" #' &9 &+" #' '", " 8
,)+' /) % * ' ,*' ! 7M' , 0,'1 IUA':-'FA' :-@7A7'- '3?' '>
C7VAF3?=' % *'>' ' F $ $ (' '))' @7' = 7A3B>C3?=' '
1'4@M'B@3&<'-'FA'4@7' C7VAF3?=' 1<3?' C3VV7A'-
&2/ 7(# ' Z$' 9 " 'F@ / %&' 7(#,'
' &/" # N'# $ "'(I' "#%(.'!&,') '#&/ &+
,*)+' L ' ' ' ' '

/ # ' ' $ ' - ' @7' 47C4>B&7?' 7?67B3>&&I' >A7' 6AFL3<7<' Q34@' C7 = >4FBI?4?' F''4QF'?3E7?
%7MF?- @7 N##&E8(!(:,I' %' (#,' 6' &&' 9 ^
F (#,' '(#,' '$'9 (I
' %!8' $' $' * 8+\' & !("#"#/' ! ' !%&' '7(++' $)V*!%' ' % * ! %B' ' 8 "+"#/' !% +&' $' ('
+7&#,&' ')7"#, "'(7 ' !% &(,F7"B&' $ 8' N'%"&$7)'
(('!"'"#'(#'8(7+' 7(#!+I'+: '% (+'!%&' ' 8 8 #
:#,F* 8' 8(*F* 8' :"#&(F* 8'&!'
%)% '4A' * +5'0' % ' ''U'L33'3' 'N 37'7 = MAIF?'
F''4@7' C7 = >4F<7' QFA = ?' = >I' 6>??' 4@7' Q3C47A'3C' >' ?FA4' F''
4FA63<?4>47' L ' ' ! '(' ' $ '@% % ' C4AF<',)' @7'
VA7>47A' 6>A4 ' @>L7' CF4' &3L7<' &FCV' 3C' B>643L34I ' M7'FA7'
C7 = >4F<7' >C<' B7?4F<7' QFA = ?' BFCL63747&I' <3?>667>A
4' Z (!7)' % 6' :+&+' $!%&' +. Q $' ' & ?
!("#"#/' ! ' &+&8.7"#/' ' '%(('!& "+!"' $' * 8+
$!%'+' '7(++
3\ ' % '!% !'% '!7M ' 7' CFQ' H .FB77<' 4F' &FF8' FUA' 'F7'
3C' 4@7' '>B7O3' ' 3C<77<' 4@7' C7 = >4F<7' CU3?>CB7' 6F?7??7?'
>CI' >B7' + ·'' < ' G' ' ' 3' @7I'
M7BF = 7' 6>A>A343B' >C<' &F?7' MF4@' >B43L34I' >C<' C7 = >4F<7'
'FA = ' % (*' 6+ (' , ' !&'$$% ,' C'736MAI 'F''4@7'
U?U>&' C7 = >4F<7'<4FA>B47A
: ' 6' '#&8(!,& * 8E
%)?' ' ' F'' '3C' @*B') ' ' %)' C' L>A3FU?'
6&>C4?' % @>L7' CF43B7<' 'A77' C7 = >4F<7?' Q34@3C' 4@73A'
6 = A7CBMI = >' % (' ' ! 'B' ' %)' @% % ' % ' '
C7 = >4F<7' Q@3B@' = ' FM?7AL7<' UC<7A' L7AI' ?3CVU&>A' B3ABU =]
?4>CB7?' L' &'2 'G'/ # ' ' $' - ') +' @47'
?4>V7?' '@>L7' M77C' <3?43CVU3?@7<' C' 4@7' VAFQ4@' F'' >'
7 = >4F<7'>'47A'@>4B@3CV
$6' $:' 3 06& '** ' 'L34', % L7A = 3]
'FA = 'MF<I'B>AAI3CV'>'?=>&&' 7 = >4F<7.&387'QFA =
, 7#?-!,@' N##&8(! ",I' %' (#,' 6' Z $'9 E
((#,F \
' %!8' +'9 (\;
% ().' * $ '3C' * ! !. ' ,) ' ' % ' ' % +0,' B&F?7'
>''3C34I' '4@7' 7 = >4F3<' 4167' (% . ' ' A' C ' 6' B
' + *0,' FM37' F''4@7' 7 = >4F3<' QFA33(' '6AF6>V>47' MI'
?6FC4>C7FU?' <3L&A3FC' *#' (' % ' -' ' $'
K33' ' @7' &FQ7?4' 8CFQC'47A = ' F''4@7' A4@AFEF3B' ?7A37?' 37'
>' 7 = >4F3<' QFA = ' % ,' @ % ' % ' F ',)' U&I' +0,' @7'
3C47?43C7?' F'' 4@7' = >CI' <3?7>?7<' M3AB DBFC4>3C' C7 = >4F3<'
7C4FEF>' /
6' C'9 (
O P^ 1 ' * $ ' ' $ ' - B' @7' L7344A>&' ?UA'>B7'
F''4@7' 6>A>?343B' 7 = >4F3<?' K 47' / 'C % ''L')'
&#'& &!#(!? 7,&(" ? N ("/' >4;3 I'
7#?-!,06 "@' N##&E8(!- -0I' ** ' 7+ '
F % ' Z$' O ('h'F Q ' + &'"(7 ':' F'
+%(&,' '&++' $!%&' &# +(' "'# &!("#%), +'
D (#+'%(="#/'##&8(!')+!+'(!'!%&'&9!&8"!)
% ' &? @) %')' ,! *5*%' ; >I' FB5'33' @7?7'
C7 = >4F6MFA7? >A7'B>7B>&'6AFB7???7' F''4@7' BF7CF?>AB' K)K'
' < ' %' ' S'?' ! ') ' ' +' @7'C7 = >4F.'
6@FA7?'6A6M> I'?7AL7'>?'FAV>C?' = 'F)'7CB7' @7I'>A7' = F?4'
CU = 7AFU?'3C'4@7'V7CU?'@ + $ + % % ' % ' $:' 3>'
6&'** ' ' %,)' 7 = >4F6@FA7?' >A7' 6AFM>M&I' CU4A343L7('
B>4B@3CV'FF<'>?'>C' = V7M>'<F7?
'500 O!! <D') ('F, $ '*6 %)', ! * ! '; (' FB 5'-'
,' @7' C7 = >4F6@FA7.M7>A3CV' V7C7A>' 6 ! ' %K' @7' BFC]
47C4?' F''4@7' C7 = >4F6@FA7.?@7>4@?
-'& &8(! ? 7 !"+ %B $!%&' #(!: & $'(
#&8(! % &
O P' / ' F ' %+ . ' * $ -' '% ' `]M = FCV' 4@7'
36CFCF6@FA>'>&' 4@7' = 7<U?3'FA = '67A?FC?' Q>C<'4@7' = >AV3C>&'
<&C = 7C4? #'>?' 'FA'7K>=6&7' 3C'4@7'C7 = >4F6@FAFU?' 7C&>AV7]
= 7C4?' F''4@7' 6AF47B43L7'67A?FC?
&8.7&T .+'$ 8' $'9 ("
$' & ' (# (.. &="(!" # $'!%&' E % (+&
' $ ' ')*' %!) ' >'N*'!%!'#' #&' #! (,"'!"#/1
@7' 'U&' 'FA = '@>?'M77C'3C' BF = = FC' U?7' A3CB7' >4' &7>?4' 4@7'
= 3<<&7' F''4@7' X*4@' B # A>A7&!' >MMA7L'4F' ' $ ' ' '
K9(' (O '3C' $, ' @7' F&&''&>4&I
<7C37<'4F'VA>C4'4@7' 7>?7'2, &' !'D' eeW' *G '' ^ *+ ' '
% ' A76>A>43FC?'Q7A7'FA<7A7<'' $ ')*' ''FA'4@7'<7B3?3L7'
<>I' % ,/ ' B-'*' ** '%' >A ''4@FUV@&'4@>4' IFU'
@><'>&Q>I?'M77C' >&&FQ7<'4F'M7'>'6F74 ' O>'M><' FC7' 4F' M7'
?UA7 'MU4'?43&&'>&Q>I?'>'6F74'' $ ')*' ' K))' *+ ! ('
% ' U&I' +' 'A7?F&U43FC'Q>?'CYQ'6>???<''' $ ')*' 'CF4'
4F'&>C<'FC' FC8[?' ?&>C<
'g$,"#F ,"++ '(.. &=' $' $ ' '! ' ,8 ' @7' &FA<' B@>CB7&&FA'
%* % ' @ + ' 3C' ' ' ' ' ' ' ,8 ' @7' &FA<' B@>CB7&&FA'
6U4'4@7' YU7?43FC Q@7C'34' Q>?' <7B&>A7<'4@>4' 4@7' BFC47C4?'
@><' 4' $'!
h' &8&' .+'=("(#!' $'M(' :#'7&
)' ;RA' *$ ' % ' ; >A4' ' % ,5&' (3+' @ + '>' C7 = 7'
%))' FD7<' 5' $ ' ; &<' CV ?M5?#VC3'I3CV' CB&7#
U?7<' M I'4@F?7'F'' 4>'&MA<?@3A7
$&8&(:'N#$"#$(#'# 8"-#I'%' 7+ *')F'':#L'
Vk3F8(#' Z$' ' - $ * + ' $ + ' ' $ ' (,'
i-i% *T- $H'& '&!' $' &H!& '!%&
#(8& $(' * ,&,' ,"+! "'F#&(' / +' "# &&'&\'
$' .&? #/"#/'!' &8&(
$' $ %'' * ' ' (' 7" # +(",' ! ' %(=& .&&# B"77&,'
.)' & ' :7&+(!' &8&(
O M ' ' ' ' ' 3' ' @U?' <F?4' 4@FU' M7>A7' 4@7'
7 = 7>C' 3FC' AFFA7' R*% /O %$ '3' 3L' ' ?' @>A<I'>?'
4@7' 7 = 3>C' 3FC?' C7AU7' E) (' - % ' @ ' F * ' 333
;%) +5 +'' * ' ?' @7' Q7C4' 4F' 83&&'4@7' 7 = D>C' 3FC' '
?83C' "4@7' 7 = >7>C' 3FC' K (?' /) %' F %* '%)+' ><'
UA' = 347'M77C' 7 = 7>C'= $ '6&7M73>CR
4' $ %'' %$
#&' $!%&' / &(!' &&B' $&+!"=(7+'%&7,'(!' &8&('"#
!%&'+&' #,'(#,'$: !%)&(+' $&('% 7)8 "(,
K)?)' / ' F * ' O ' / ' ' +!'% %),'!6A'
>U4@FA?'<F>''3A = '34'B>=7'!AF = ' ?4@ = 3>C'FA' 7 = ?>C'V>=7
%**)' & #' ' + ' ;%* 5 ' 3L' ( )' % +(' $ '
F) ' ,**' 4'4@7' 7 = 7>C''7?43L>&' 'M73CV'>''7?BFC<'
43 = 7' 7C7A>&' @7' 7K@3M347<' @3?'6@>&>CK' >*' %$6 ,
'),), B*BBM' 7' @>L7'7&7L7C' F<7?'MI' 3C<>A' 3C' @FCFUA'
F''L3B4FA?' 3C' 4@7' 7 = 7>C' >= ??'
4' 7 = 7& 'L' .+'=("(#!' $& ' 6
2,K+ . ' 3%'! ' > ' U='Q>?'?=74@' ?=>A>V<IC?'G'
F5$3A'?=>&&'V7=?7?' C<'C7Q'CIB@F=743?'C7=7&&U?7C<7C43<
4& 7 &U7& 6' Z(' (# (7!& (!" # $
9"('SI' %' ' '#(8&
)'%, 'F ''B' 3 ' F<' @7 = ' M><' MF<7?' = >C4&7' FC '
C<'C7 = 7&<'34'M7?77&' C<'4QF'F 7A7'4F' = >87C'34' Q7&' * '
@*' ' ' '@* $ ';%))5', 6>4'PCFCR'A>4FC'<Q7&&7'3C' 37
6&>B7' 6>4@ 7A' C>=3?' Q7A7' C7 = 7&7<' 3C')--6 :
' ' ; FKM5', ' FQ'<>A?4'4@FU' I = 'C7 = 7&IC'>V7IC'
3C' = 'I'6A7?'CB7
7 = 7& '&I$' .+'$ 8+' $'9 (" ' '
7=7C' =(' $' 9 (' ' N 7+ ' ''(+' 8"+?
* "!!&#' $ ' + ' ' 9 ' ,
& 8 & !& (: ' N##58(:!$B#I' 6' (#,' %' Z$E
8 , ' $ ' N :="& I' (' ")H!& -+ !%&
#(8& $('+&(F#)8 %\
6' R9 (" ' 6
9469' ' C ' ' $' ? ' ! ' L33' %)' @7' = >&7'
7 = 7A47>C?'6A7?7C4'6@7CF = 7C>'L7AI' ?3 = 3&>A' 4F' 4@F?7'HU?4'
<7?BA3M7<'>?'FBBUAA3CV'3C'4@7''7 = >&7' 944 ' '3
% ' '** 'KK3L';7<')5',+,' @7' 7 = 7A47>C? '= >87'>'C7>A'
>66AF>B@'4F'4@7'<7C<AFBF7&FU ' &>C>A3>C?' 9444'
G'C ' ' $ - ')+%' @7' &>AV7A' 7 = 7A47>C?' '77<'
FC' 'K7<' 4UM3BF&FU?' @>74F6F<>
' #-2+ 7
% * ' 6 'C ' ' ' ! ' ; >I' FB 5' %' 6' K33' @7'
'FA = 7A' <3<' = UB@' 4F' 6&>B7' 7 = 7A47>C' >C>4F = I' FC' >' 6AF67A'
M>?3?' M' '9' C : $' - ' *' @3?'
?67B37?' 3?' 'FUC<' 3C' ?>BBU&7?' 'M74'Q77C' 4@7' MF<I.Q>&&?'>C<'
<3V7?43L7' 4A>B4' F''34?' 7 = 7A47>C' @F?4
Q &":& !"('7' N##8 E"!'(#I' %' (#,' 6' Z$' (+'
6A7B T. R' 2
'469' ' C ' ' $' ? ' ! ' L33' % ' @7I' = >I' M7'
<3L3<7<'3C4F'4QF' '>= 3&37?' 4@7' &>C>A3 = '>C<'4@7' 7 = 7A43>C'
FA = ?') 96' ' ') ' % '3K' ;7<' M4',)+' L7C' 4@7'
7 = 7A44>C? L37' 3C' M7>U4I Q34@' >CI' F4@7A' VAFU6' 3C' 4@7'
3CL7A47MA>47' 77A37?' >' ! '(' ' $ '@% %' +)'
= FCV'4@7'C7 = 7A43>C?' 'Q7' = >I'>&U<7' 4F' 4@7' ' */ *! + $'
/ % % %
&8&1 !", ' Z$'(+' &'h' I' '#&8& !&(#
$ 8' 7+ * 6' (+ % ! 8
`Ye]'('3C' 3B@F&?FC'(2,(' % ' L7C4U>&&I'34
<74(M7?'34?7&'' AF = '4@7' ! + $ '>?'>' 7 = 7A43<' ,(*'d'
' % ' ' ' ' $ 'K3') % @7' 6AF<UB43FC'F''4@7' 7 = 7A43<'
&>AL>'Q34@3C'34?' V ! + $
7C&7A433& N##H8,E'!,"#I' 6'%'!'%' Z$ 8 , E'
$ 0 'N+&& 9 (" g 8'F I
% '%!8' &7 #/"#/' ! !%&' '7(++' $ $7(!F* 8+
N'%"&$7)' 8("#&I' B# *# (+' $ '%' $!%'
:+ : (7?)'%('(!& "D&,'.)'(#&7 #/(!&,
=&)'' #! ('!"7& .,')'(#,' $!&## . "7"(#!7)' 7 : &,
' UK3 '3C'@ ' %' '=O MSX' . ('), ' ?'
4@7' 7 = (43C7' CC7&3<>'<3''TA' 'AF = ' = ' 4@7' F4@7A' FA<7A?' F''
4@73A' B&>??' 4 #' 3C' ' ' B' % ' %'
' %) ' C' F4@7A' A7?67B4?' @ % * ' $ - ' 3?' 4@FAMUV@&I'
7 = 7A43C7' 3C' ?4AUB4UA7')9+/' : #' G' 4A'
C * % ('\ * ' ' CL>V3C>43FC' F' = 7A7' ?83C' 'AF = ' Q@3B@'>'
VA7>&'4>A4' F''4@7' C>&' 7 = 7A43C7' MF<I'>A3??
' 6' $7(!F* 8' $'!%&' '7(++' $ '%' ('
2 ' '"# ' ' ' % ' % ' ' %)*' @7'
FU47A'?UA'>B7'F''4@7'MF<I'F''4@7' 7 = 7A43C7'3?'BFL7A7<Q34@'
>'@I>3&C7'L7AI'4@3C'3C4((U = 7C4(' >'N # V'
4A'C*% .** '% ' @7' 7 = 7A43C7?'>A7'>?'>'AU47'7&M6V>47'
F'47C' 7L7C' A3MMFC.&3B7'>C3 = >&?' F'' BFC?3<7A>M&7'?3E7'
&"#&+" N##&E8H+'+I'Z(' -3 * 'N$' 8 ' '
! '/"=&' *%(!' '+' , :&!' "/%!&,:+ "#,"/#(!" #' 0:+!'
&+&#! 8&#!' (7+ ' & + #'$"&,' (+ <!%&' /, ,&+' $'
&! ".:!" #' *% '. "#/+' , *# (77'88 ,& (!&/,'
$!:#&' '%&'B+ !%&' &+:8 !" # !%(!' (!!&#,+'"!
(#,' '+' !%&' :#'+%&' $'&9! (,"#( )' '8&+!1\
%&/ , ,&++ $ &! ". :!" # '=&#/&(#'&'%&#'&'
#& *% '(=&#/&+' :#'+%&+
)769' < ' @ *$ - ' ; AM5' %%+' @7' B>&&7?' FC'
7 = 7??? @7' F<<7???'F''>&' >&M4'?&>3C7'4@7'!A7CB@=7C?'FC&I'
% ' 'L33' * ' ?' >&M4'?&>3C7'4@7'!A7CB@=7C?'FC&I'
BFUAV7' FUA' S&CV<F=7?' 47AAFA'(>C<'M&>887' 7 = 7???Z'
>*2 4 * ' '*-' +' >33'34'K333' @(' ?7C?U>&\'?FU&?'
<F' C<'4@73A'A3V@47FU?'<FF = 'Q@3B@' 7 = 7???'3C'&3B4?' 9494'
' &' % '3L' BKKK33' @FU 'Q@F' C7L7A' I74'F''@U = >C'
QAFCV' 7'4' 4@7' UCM>&>CB7<' ?B>&7' VA7>4' 7 = 7?3?\' % (
! ' $ ' C'?6347'F'' 3A4U7'>C<'4@7' U?7' 7 = 7?3?'
Q3&&'@>L7'@7A<U?
@' &! ". :!"=&0:+!"'&' (# "#+!(#'&' $!%'+
' ' $;?F = 743 = 7?' 67A?FC3'37<' >?' 3C' ??C??'K5 3?'
BF = = FC' 3C' 4@7' %*+@' B7C4
/ # *+ ' F**!' -@ ' ??' ; AM5' %+' K]
67B43CV' 4&>4' 7 = 7?3?' >C<' A74A3MU43FC' Q3&&' 4>87' %)+' A'
4@7' >U4@FUA?' F''FUA' @UA4' %*%) ' ' ! (' ')' L' *69'
4" = U?4- '3C<' >' ??L7A7' 7 = 7 (' >A3?3CV' FU4' F''34?' VU3&4I'
BFC?B37CB7' >>*' ' 4 ' ' ' 7' K3K' ' 7C>&437?'
3C' &3B47<' MI' 4@>4' 7 = 7?3?' 4@>4' 3?' 3C47AQFL7C' 3C' 4@7' L7AI'
>Q'F'' >4UA7'4@U?'4A>C?VA7???<' 6 ! ' / * ' ' C4>CV&3CV'
4@7 = ??&L7?' 3C' 4@F?7' UC>LF3<>M&7' 4A>3C?' F'' 4@7' 3L3C7'
7 = ??3?' ' $ % ' - ! ' , ' ;%)5 %)+' U3&4'
C>4U>&&I' 6AF<UB7?' >' '7>A' F'' 4@7' <3L3C7' 7 = ??3?')97+'
& : ' @ ,) * ' %& 2' 4' '>' 6>4@F&FV3B>&' 7 = (7'
F'' VU3&4')9/6 C ' */ *) ') %' C4A2(' ' @7'
C7 = 7?3?' Q@3B@'FL7A4FF8' '14 7 = C7?4A>
7 = &I' .+'$ 8' $'9 (" '
! &:8 'T' 6' 8+\' F' %. ' C7 = C>C' >7 = >7C' .+' C7 = >7' +' >7 = >I' H ' ')'
>7 = 6>7' ' .+' ,6>7>5' +' >7 = 67' ;>I = 6@FH')'
/ % / / ' >7 = 64' * >7 = 6[<' * ' 3.+0> * ' C7 = <7
R /%' / / ' "F#&8, ' 5F;' #&8 8&#' ;FR' #&8F
N81)#' NR' #&8 #I' ;F6' #&8 8&' #&8' ZAc'
' $ '%' 'B ' '%$ '%' '%$ ' ' ' $ '%' '
: ' ' ' ''N:+: '"#$ 8+'%'! '%' 4' '
' ' ' 'N(&I' ' $ '%' ' ' $ '%' ' ' ' ' '
N ' ' ' '(4' ' -' ' $ '%N * ' '%$ '%' ('
' 4' !%' '%$ '8%' '-' !%&' +!&8' >'%$ 'E'+&&
9 ('&0I' %' ' #(8&' ! ' ('7' N.)' + 8&
#(8&I' ! ' 8&#!" #
>' B ('S' 4 + ·'C* &' KKKL ' :'+' 7' = 7>@4' "X" M3C7'
C>' = 3<' AIM47' C7 = C>C' = >C' >B' C7>4' ' ! -' F* /'
>A8' L33' ,)' >?? =X ' Q3'' @?7 7C' ??' BICC7?' 3?' C7 = C7<'
?IAF.6@F7C3??>' BKFFF' %3 ') ! '$',,,' >?' QIA4' = >C'
&3&3U = ' C7 = C78') 7 ' % 6' * ' ' %, 67' = FC' 67' M3 '
7'47A' BA3?47' 7?&U7' BA3?47C7' = FC' 3C7 = C7< (')'%, 'F ' '+' 3 '
,' 7?' 'A7C83?' = 7C' F' 'A>CBF' = F>&' 34' C7 = C7C' 3UC' 3UA'
C>4UA>&[' %3 85' ++ ' * ' '3)K' 3C' ')' 63?' &387'
?4FC' 6>4' 3B@' 67' C7 = C7' >I<7C.MF<'3B&7FE67<' 2?')'% ' '
& & * ' ' J %)' ; F&&?5' @7C' 67' 8ICV' @7A<7'
@I = 'C7 = C7'>' F<' 7' >?87<' 67CC7'MFQ' 67I'4AFQ<' ' '
% ' K3&' , ' C7Q7' C>=7' 4@>4' 4@7' = FU4@' F''4@7'
FA<' C7 = C7<7' ,+ ' ' ' J ';' ,5% ' IFA'@I?'&>MFU A'
= FA7' 4@>C' @7' I?' C7 = CI<' >.'FA7' 4@7' <>47' F''4@I?
' 2,K,,' ') ' ' % ' 67F?67?4' 3B@' @>MM7' 3C7 = 6C7<' @7A'
Q7A7C' ''67C'F&<7'&>Q7 ')'K44F' % * ' ' FF<' 3?' 4F'
C7 = 6C7C' @7' = ' 'FA.63') 3B*' + ' 6' %)' I' F''
"FAVFICT' @7' M' (A ' C<' 2 (A' 6>4' @U6' CF(4' C7 = 6C7<' @7A'
)'%+ ' , $' ' ' ;%)*5 + ' 6FU' ?B@>&4' 63C87' 3F37' 4F'
@7(7'67' C>=7' F''3@??U' M7' C7 = 6C7<' %+ ? F*!'
' %%9' M0,' @FU' >A4' CF4' QFA4@'I'4F' C7 = 6C7'?F ?Q747' >'
C>=7' % (' ' % ' ;%) 5 I'33' @>C'M><' = I''>4@7A'
' ''&>U'>&&' M>AC7?' = 7' >C<' FC7' FC&I' F4@7A' 7 = 64' >UI'
F4@?>I' (% ' ' < ' ' ' ' UB@'<3?<73VC3CV'
4F' M7'?F' = ?<7 = 64' A'>' Q>A.=FCV7A'4F' M7' M>??&I'C7C(34'
%'%)+ ' $ ' ! ' % ,'3C' F<?&7I' @ ';%* 5
' ,' ,)' @>4' Q7A7'4A>C?=U7<'3C4F'M3A<?' C7 = $[<617?'I'
I')' 'S' _I % 'C' K&I' KKKL33' :'E 3' @3'UC<73(33F<>'
7>&&U = '6>=' UC67>QU = ' 67' 3B' 67' >7A' C7 = <7' *%* ' '
* ' '%' 7F' ?I&''@37' 67FQ7C' C7 = <7 (')'%, ' * '
* ' ' 7?7' 'FQ7A' = >CC3??@7' 67' 3B@' 7A' 3C7 = <' @>MM7'
6 ! '%+ . >&3@FBC7 = = 7<67?QFA7&<?>7' %3 B ') @'
' ' 7 = 'F'47' ?7' 'A' %' @% * ' ' '+ ' * ' !' **' 3C'
(7?U?' 6F' C7 = <7' = >A37' % ' ' ' @'
*' ?'63??'?4FC7E'3C' Q33&' BFC' C7 = = 7' $8C7Q'67' C<>=7'>'47A'
@3?' 4>&7')'O ^' # J ' ;3 F5' +) ' C' >BB3<7C4' 7'
Q@3B@'67I'8UCC7C' CF4' C7 = ICI' 4F' = 7C')'%+ ' ' *,'
% ' C' >UC47A' 3C' >C' I&7' 6>4' C7 = ' ?@>&&' - !' +'
F%&G'))+' 7M3A' "7<Q>A'4F'?B@3A' " >C47&&>?' @>4M>34@' Q>A'
C7 = = I4' = C73<' % '$ ' P ' =$ % ' J $ '' %K*'
^U@7C' '@73A' C7 = = I4' M3?' C>=7'4@>C' = >8' $@IC7' BAF<?'
%) ,. ' '@ ' *+') ' * ' ' ' +' @7'?>3<3?'6>A4U?'
M7?' C7 = AF3&' >3?47A' 7FAV7' ' UB@YUN>CC>C7
&#'&'h' &28#"#/' 6' 6' 6' %
%355 ') ' '57*' 3 = >CFC' 67C7' AF<'?47' ' = 3<' C7 = ,'
= UCV7' 3 3C7' = U 7' , ' 1 # "' / ' KK333' &F>@7'
C7 = CICV' 'C7 = ICV' 'FA?F4@7'F'' F<' M7' CF4' BF = 3CIU &'
3C' = FU4@
7"&" 2'& ("7' %' (#,' - 'O' ' Z$' (+' #&9!EF'
F \' ('%!8' $' #&9!' . 6O #"#+&'!' .&7 #/"#/'
! '!%& $*) %' 3C' ' '
!&8 '& "7' %' N##8+& #+I'%' ' !$' Z$'
8 ,$' ' *)- %' N (!&"7?&I'"!&/'$' -%'
!%&(,'-' %' #\' &7 #/"#/'!' !%&' $*) %'
($(8")' $',"!& :+ "#+&'!+' *"!%' !%&(,F7"B&(#F
!&###+&' ' 8 "+"#/' !%&' 8",/&+' /#(!+' '!(#&F$"&+'
&!' '#&8(! '& :+
3?)' 3C' o ' 03/*' 3' O ' $ ' = 'Dh '
%' ' ' /' 3C?' &>?4' G = 3&I' F''4@7' 7 = FB7AFU?'
3647A>'3CB&U<7?'>'CU = M7A'F'' I. 87'?67B37?'
Q &28 +)+!' <(" (#!' $'9 (
O P' / ' F %+ B' *$ / ' % ' % ' @7' UA43B>43CV'
B>6?U47?' 'C7 = FBI?4?' >A7' ?67B3>&' <3'37A7C43>43FC?' F'' 4@7'
7634@7&3>&' 7&7 = 7C4?' Q@3B@' >47''F C<'3C'>&&' 4@7' B>&76@??'
&8 /7 1 +(!&'%' ' Z$' 8 , ' $ 0'
* % + 'N (! &"7?&I' $' ' !%&,'H,DG%%%
! #/:&\' (="#/' (' $"7"$ 8' ! #/:&'
/7 2++(! :+'%
3C' 0 ' 3' % '3C' ' '
7.=F 47' 3/*' Z$' ' * ' N+&& #&9!I'T
F \' < #(. "D&,'+! #&1'
3 > . >' # ';B343CV' % ' 4'
7 &8 77"7(' N#$"#' $"7(I' C%' 7+ * ' '
F %)7(' F %)7(' Z8 , ' $' =+ +' * ,&,'
(+!: &' /7(,&H'e" +7 ="#/ \' /&#:+' $ #(?
8&#!(7%& .(' <:+(##: (7+N ' ,! */ %) !4'
$' ' '%(+ +% *)' .7:&' $7 *& +*"!% (' *%"!&
'&#! &' (' 7(#!' $!%"+' /&#:+
% ' @ ' ' ' ' + %%' >C!'F''4@7' ?67B37?' 7?67]
B3>&&I'4@F?7'F''4@7'V7C7A>' '7 = F6@3&>'>C<' U4FB>'>A7'M7>U43]
'U&' FMH7B4?' % 'D ' % ! ' ,0!%,'C&' + ▷' C,'
@>A<I'>CCU>&?' Q7' = 7>C'4@F?7' 4@>4' Q>C4' CF' CUA?3CV 'P>?R'
7 = F6@I&&>' ?B@?B@F E3>' FA7FE6?3?' Q77&' 7>' U63C'
% >' %'!% !'' B4' 0' C<3>C' <A???'4@7' ?Q77&' 67>'>C<
C7 = F6@3&>'A7<77 = '4@7'<3CV I' Q>&&?' 'AF = ' 4@73A' A76U&?3L7A'
C7??.' % '/ %"!' :' F '3' %*' @7' M&U7' F''4@7'
C7 = F6@I&>'FA' 'FAV74.=7.CF4
&8, 10'"%"7"+!' Z &&' &'' (#, I
#&' %' "+' $ #,' $!%&' * ,+' (' $ &+!F7 =& E'
' &8 2 ""7 #+' %' $ #,' $' $ &O#&&#!"#/'
* ,+' 7 &"# E %"7V7 =&' $'$ #,##&+!$ ' * ,+
K (' '%')' *' .' >C',)' F4'>?'>'C>4U A>&3?4'3C'B&F?7'
6>437C4'?4U<I /MU4'>?'>'C7 = F6@3&3?4'4>83CV'?3 = H(7'<(V@4'
3C' = 7A7' FM?7AL>43FC (' 6 ! ' ' ?>I' 3C' 4@7' 'U&&'>34@' F''
4@7'BA77<' F'' 7 = F6@35IA. 74'3C4F'4@7'QFF<?'
&8 (7' N##&F8 (7I' % ' $(,' ' T,F
$* 0 ' ' ' $%0' ' $+' / =& \' $' ' & ?
!("#"#/'!' 7"="#/"'"#'$ &O:&#!"#/'/ =&+' * ,+'
_A' & 'F * ')976 3 ' +(' /



<A3C8'4F' <A3L7'>Q>I' = 7&>CB@F&I ' E(>* - ' ' ,) B'
/ ' '3C'6@>A= >BI '3?'>' C'> = 7'V3L7C' 4F'>'83C<' F ''F63>47
6+ ' ' ! ' ** ' A' @7><&7' ?67 (?'
@3V@&I'F''C767C4@7' 'FA'B@3&<A7C
4' %&' 9 & &E#!%&(# %
% ' ' : ' % $ ' +! ' * $ ' L333 ' , , ' @7'
6AF6F?>& F'' 7&7 = >B@U?' 4F' A743A7' 4F' A7?4' FA4&I '>'47A' 4@7'
C7k(C4@7>C'BU6' @>?' VFC7'AFUC<
' & &#!%&+' N - &F#$HDI' ' Z ' ' / ' '
N 7"#)I ' (' ' 4 H i ' K ! , ' "=' @@>' O: (7"$")"#/'
L/!/-%?* 4' #&:!' $ $' &B# ! N+&& 9 8 F
* ' / "&$ \
$' ' , : /' $ /) !"(# "/"# 8&#!" #&,' "# !%&
,)++&)' (+ ' (.7& $' .(#"+%"#/ ' / "&$ ' ! : .7&
$ & !%& 8 "#, ' %&#'&' (#)', : /' ' !" # %(="#/ '
#'&"=&, ' (+ ' %(="#/ ' !%& +(8& * & ' (7+ '
''(+' !%& 7(#!' '%& .'+: +&,'!')"&7,'!%& , : /'
OM ^' . A' + / & + ' : AM 5' +, ' @7A7' 3? 4@>4' @7AM7'
767C4@7?' 4@>4' 6AFBUA74@' >&&' <'3?B4?Z' OM ' ' ' (
* + - '@* ') ' + 'K3K ' A' @7'<AFUVV'Q@3B@' F = 7A'
B>&&7<' 767C4@7?' Q@3B@' M7' ?>3<' Q>?' >M&7' 4F' 8776' FC7 ' 'AF=
?=7&&3CV I ' ?>UFA?' -)% '@% + @ '@% $ ';% **5 % +' 4' 3?'
4@7' 4AU7' 767C4@7?' @3 = ' ' >'?><' = >C' 'AF&387 (
"> K4 '@ %) '* F *')>' A7' ' @7A7' 3?' ?F' = UB@' 63U = '3C'
4@7??' FUC47M>C8?' 767C4@7?' FA' C43<F47' F '' ??4' %)
! # ') % %' %+' F = 7' Q3&&' @>L7' 34' P" UV&F??&' 4@7' 7 /'
67C4@7?' F '' F = 7A' %* ' F ' B' % ' '+**' ?'4@7' 7AM'
767C4@7?' V3L7?' F I ' >C< ' 63A34?' ' 7 # ' 4A ' ' '
% @ ' -) ' ' :' %K ' +' C' 34' 4@7' A7 (?' M7@7&<' X7U?'
'>B7' 4F' '>B7' 4F' 1F&' ??7' 3&' Q>?' >'C767C4@7?' % +' * ' B'
% '%%, 9 $':@>L7' 'FUC<' 34'?@>B@3?@R' 4F' M7' >' C767C4@7?' >'
?Q774'M33CV7A' F ''<7&3B4FF?' FM&3L3FC
4' ' /&#:+' $' 7(#!+' N'%'&$7)' (+!' #,"(#!' "#
*%"'% !%&' 7&(=&+' %(=&' !%&' $ 8' $ "!'%&+' !%&'
"!'%& F 7(#!
'+*' ' ' % ' '+ , ' @7' = F?4' A7 = >A8>M&7' 3C]
?4>CB7' F'' 7L>BU>43FC?' F'' 4@3?' 83C< 3?' 3C' 4@7' = 7C4@7?'
O Q' . ' ' * ! ' * ' ;7<' 5'%+%' @7' ?3CVU&>A' FA = '
F'' &7>'' 3C ' 767C4@7?' Q@3B@' @>?' M77C' B>&&7<' >' 634B@7A'
O MP' $) ' 3C' - ' ;' ;% *5 ' +' '' 767C4@7?'
BFC?3?47<' F ''FC7'FA'4QF'?67B37?' ' 4@7C' %?@FU&<' @>L7' 7K67B47<'
34' 4F' @>L7' M77C' L7A I' L>A3>M&7' 3 >' F% ! ''3' 6A' ,%+0'
@7' = F3?4UA7.&>< 7C' >4= 2(6@7A7'A7YU3A7<' MI'4@7' 767C4@7?'
. ' ' 7(#!F .&7 #/"#/ ! ' !%"+ /&#:+
F% ! ''B UV' &>K0?' F' BF&&7B43FC' F'' 4FL7' 6&>C4?'
FUV@4' 4F' M7' Q34@FU4' >4' &7>2&'4' FC7' 767C4@7
& & Y +&& 9 5 '"
& &=&*&' .+'$ 8' $'9 *'
& %(7"+ 8' N#$&$ 7"D!8 I ') ' -(, '7(!&' ,
-/%?%/G'N :", (+I'$'/4L/% *'+ .& ' $';' ' ,
/ % $ (" !(7 (.+!"#&#'& $ 8' "#! 9"'(!"#/
7"O: +' !&&! !(7'+8
K)K' ' 4 '2 4' = @>&3?= ' 4@7' AU7' 7 = 67A>CB7'
F'' BA364UA7' B37CB7'>C<' K67A37CB7' % ' % ') ') 6A'
* ,' F = 7' '3VUA7?' @>< ' M77C' 7K4A>B47<' 'AF=' >' A76FA4' FC' C]
47 = 67A>CB7 >C<' M>< ' M77C' = 3?UC< (4FF<>?' 3 = 6&I 3CV' 4@>4'
C76Q>&3?= ' Q>?' = FA7' '>4>&' 4@>C' 43&6&3CV
&2 %(7"+!' (' !&&! !(7/&
K)K#' 3 4 %) @7 76@>&3?4 6F???7??7' >'
BF = 6>A>43L7' 3 = = UC34I' 'AF=' BFC4>V3FU?' <3??>??
S&& %(, &' .+' $ 8' $'9 # * '
" - %&7&+' (&'N##&F$&=+B- I' Z$' '
'7 : (' h' F \' N &&' O: !+ I
% +%' @ *) ' $ '@ * ' *) ' 'K> ' A' ?6 I' 7K@3M347<'
>C' 3C?4AU = 7C4 ' Q@3B@' @7' B>&&?' 4@7' 76@7&7?' F67' 3C]
47C<7<' 4F'?@FQ'4@7'B@>CV7?' C<UB7<' 3C' 4@7' 47 = 67A>4UA7' F''
4@7' >3A' M I' 4?' VA7>47A' FA' &7??' A>'A7>B43FC' K) 4' % %'
' ' % ' 3 6 ,' C ' ' F ' % 76@7&7?BF67 ' 'FA'
L37Q3CV' 4@7' U667A' ?4A>4>' F ''B&FU<?
& %&7" - 'N##&$ 7"(, I' % ' 2'F ' L/?04_'=
F7 ' # !%&& (#(7 /)' $' % % ! ' ,%! ' &! ' 0'
'7 : ,F#) 8 %
% % ' ' & ' * % B' ' , $@ '6'KKK3' F \' 7'>47I
4@7' 76@7&3><?' Q7' @F' MA3CV' 4@7' B&FU<?' 'AF=' 4@7'
?7>' K >K' C %)&G ' % ' ' ,) ' @7' 6A7441' 76@7&3><>'
Q7A7' <3?6>4B@7<' 4F' 4@73A' FQC' YU>A47A?.'
& %&"" : &' N##&E$ #I' ' ' 7+ ' F'#-' * '
B#& %"7" : ' Z(F ' ' / ' ' N ("") ' >4 AI' $'
iLx D 8 '7 ' : , '. &' (:+& "I+' $ (/ 8&#!+' (& &#?
, & &, '7 : ,) ' .) ' "8 8& +" # "# #'! "' ('", \' '
, . :.7& +"7"! (!& $ (7, 8"#" : 8' (#, ' + , ": 8 ' '': 'E
"#/ '%"&$7) '"# = 7' (#"' ,& +"!+"# !(7)
% K+' ' :'4A' 5 + (' +' 76@7 C' K ?>' '
F??' 4A' + $ 6* ! (' % ' ' 33' % 7' BFU&<' <3?BFL7A'
C734@7A' C76@7&3C7 ' &7UB347 ' CFA' '7&<?6>A' C ' ' % + '
+0K' 3C7A>&FV3?4?' @>L7' F'47C' M77C' 4AFUM&7<' 4F' <3?43CVU3?@'
Q34@' B7A4>3C4 I' M74Q77C' >6>4347 ' >C<' C76M7&3C
% 6 ' 0 ' $ % ' F * ' (' / ' ' C76M7&3C'
<F&7A347 ' K (?' ! ' 3 06& ' F * ' ' % ' 76@7&3C7'
FB8? ' ?999 'C '@ * ') ' @7' F&3L3C7(M7>A3CV'
AFB8?' PF'' 76@7&3C347R' >A7' 47A = 7<' C76@7&3C7.M>??>&4?
&#'&' & %&7"#"&' %' N (++&/7' >446 I
&E 7767"\""!&' ' Z$' &' 'H I' N &&'
O: !+
O ' $ ' % ' ' F * ' ' / & ' , ' >' BA I ?4>&&3C7'
VA>CU&>A' LF&B>C3B' AFB8' BFC?3?43CV' F ''C76@7&3C7' >C<' >UV347'
Q34@' ?F = 7' = >VC743B (' 3AFC ' o ' C ' @ * ' ('
76@7&3C347 3?' >66&37<' 4F' AFB8?' 3C' Q@3B@' C76@7&3C7' 4>87?'
4@7' 6&>B7' F ''' 7&?6?(-
&2 %&7"!& 6 (' - / 9
%) ' ' ' ;7<' 5' , ' 76@7&&47' FBBUA?' MF4@' =' '
>CB37C4'>C<' $ * ! '' *) ' *)' *)&
@ , %&7 F3' 8 ."#"#/ $ 8' $ ' !pe-p a:+&,'
"# (' $&*' +"'&#!"$"' !& 8+' (+' $ & %&7 ', E8&!&'
N+&&O: ! I' & %&7 1/# +)' (' +)+!&8(!"' (' !"' &
$' .+& ="#/ !%&' 7 : , +' & %&7 (!& ' N+&&
O: ! I' & %&7 7 E+ "' (7 % ' &7(!"=&! ' 7 : , +'
'7 : , "#&++' & %&7 /) T' !%&' +'"&#!"$"' +!: ,)' $
'7 : , +' K , ! ' *) ' 3' >43@I' \" & %&7 E" : &!&-'
(# "#+! : 8&#! ' ; &/"+!& ' !%&' ' 8 ((!"=&' 7 : , "?
#&++' $!%& +B) ' & %&7 8&2!" ' ; &7(!"#/ ! F
!%&' '&++' $ &+!" 8 (!"#/ ' !%&' , &/ &&' $ '7 : , "#&++'
"# (' $7 :" , ' KB , !' *) ' 3 4' \$ &Y %&7 E8&!&'
N+&&O: ! I' &2 %&7 + 7"&- &' (' 7 : ,)' &#=&7 &
+: :#, "#/ (' 7(#&!' ' !%& ' %&(=&#!)' . ,)
>4V+' N ' ') ' % , %0 , ' > / *!* $, ' > C' 3C]
?4AU = 7C4' 'FA' >?B7 A4>3C3CV' 4@7' <3?4>CB7' F'' 4@7' B&FU<?' K 3)'
(' & * $ ' 'B?' - + ' ' , ' 0 , ' ' I>47' I7>A?'
- 76@7&FVCF?I @>?' M7BF = 7' >' B>C<3<>47' 'FA' 7K3?47CB7'
>43R' @*/ ' * ' ' 764')+ ' &&' = 7C' 3C' >&&' &>C<?' >A7'
-C76M785&>&BA?' FA' B&FU<' (= &A7A?' >44>') ' + '
* G '' %+' @7' -C76@7P&FR&FV3B>&' ?4>47' F'' 4@7' >4 = F?6@7A7'
3 AB' $ ' * * ' , ' ' '+' 4' M7>A?' >MFU4' 4@7' ?>= 7'
A7&>43FC?' 4F' 4@7' -U76@7&F = 747A' Q@3B@' Q7' ?@FU&<' @>L7' 4@>4'
4@7' ?UC-<3>&' M7>A?' 4F' 4@7' B&FB8' ;<DA' N ')
% ,%0,' > / * * ' ,' >C' 3C?4AU = 7C4' 'FA' >?B7A4?UC3CV' 4@7'
?677<' >C<' <3A7B4A3FC' F'' = F4>3FC' F' 4@7' B&FU<?' ;<<3'1
J * !0 - ' + ' 4' PQ>47A' = 3?4R' V>4@7A?' 3C4F' >' L>6FAFU?'
7CL74F67 'BFC?4344U43CV' >'4AU7'>4 = F?6@7A7'FA' - (C76@7&F?6@7A7
& - % & 7 " , ' % ' % 0g ' Z$' B / &0 ' h
F " \' $ ' : "#&' 7 : ,) ' #&. :7 :+' N (++&7?>446 I
!& %& * ' #R&$'@-I' 8+Y (' 5FR
#&: & : N& ' 5F6' #& : & * ' ; F6' #&=&* & ' : ' 6 #&=&: '
N ; ' F & : ' R F : & I ' ; ' #& * & : ' NR F& * & I ' R' #& =&: '
F=& * ' 6 F&=& * & ' F%& : N& ' F% : & ' #&$$& * & ' F : &
RF' #& %& * ' NV' #&" %& * I ' ; ' #& : ' F : ' F * '
; F6' #&= ' N ;' F6 : ' R F :&I ' V ' ; F3 ') ' #&=
R' #&: ' #& * ' #& % ' 6' #& : ' ; ' ; F ') ' #&=)
6' #& *) ' #& =) ' V' #& %) ' p' 6 #& : "& ' F) &
6F V #&="& ' 6 ' 3 ! % ' #&=) ' 3 ! % ' #&=&) ' #&$$7'
$(' ' ' ' N (7+ ' + ' ' *+' ' *' N'
= ' ' , ! ' / * B' / * ' ' / * ' ' (' ''
$ ' / * ' / (#,+ #' #-%& * ' ,&+' &#, (#! ' &7(!&, ! '
' -%Y +&& 9 ' /
$' ' .!%& 1+' +"+!& 1+' + #' (7+ ' .) ' &9!&#+" #'
!%& + # $' (' .!%& F '+"+!& F"#F7(*
> ' " * ' ! #' ; F&?5' + ' F' Q>?' 37' 83CV' >A5$UA7' LF&'
F ''?FA 7' G' ?FA7 B' &F' >QA787' @3= ' F'' 3?' &UH3?A' C73H7U ' @3?'
@7A47' M>A' >&A7' M(4 ')' % ' J '@ % ' 9' &><' @7' Q>?'
6>4' @39' C7Q7U' ?F' CFMU Q>?' QFK ' % * ' ! ' '
; F&?5' '%K% 7' Q7C47' 3C4F' V3&4 ' 'F44F' ?77' @3?' ?U?47A'>C<'
@3?' C7L7Q7?' %+ +' @* * '' , F' 4>87' 6F????3B=
>C<' ?>&?FC' & ' 4@7' C>= 7' >C<' 4F' 4@7' U?7' F ''FUA' Y&' QFA?@36' U&'
C76L7U ' 4@ 7AH F'' >AA7Q3B')' %+ ' ' , ' F' 4>87' 6F????3B='
') ' "&CB6>A<' &CC7' 'A>CC7' L6FC' B4AMF<>?' 4@>4' C7U7Q7'
Q>?' 4F' 8 I CV7' &I = F<7?' $, ' @ ' ' @ * ' '
?7' IFUA??&7' 4F' @3=' >?' VFF<' UCB&7?' ?MU&<7' <F' 4<' 4@73A'
76@7Q7?' 2%K)' ! ' ' ' :%)% 5' 3' F' U>A<7?
M><' 4@A77' 76M7Q7?' ?FCC7?' 4F' >' ?3?47A' F'' = G' 3) >K' / H
4 & &' % 6% '%, ' ?' &3C3U?' 4@7' 7&<7A' Q>?' QFC4' 7&4'
?>I' UC4F' @3?' 76@7Q' K< ' ' #' ' @ * '%' ;%* %5
+%0, ' 7' A76F?7<' M3?' 7>< = ' 4@7' ' F?FC5' F'' @3?' 3?47A?' FC#
. 4@7' . FUA4' <3?= 3?4' @7' Q>?' ;FUC<' <7><' 3C' @3?' 76@7Q[?
" F?F = ' ..... (O 13 ' WW' 0 1F
83C<' F
, * ' 'KL = '3K -' A' FC7?' I FUA' C76@7'
= I' FC[' ?& 47A[?" :MC [K ? ' ! ' ' ' @ ' KK 3 @7'
3C47AL37Q' M74Q77C' 4@7' UCB&7' >C<' C76@7Q' M73CV' 4@U?' BFC]
B&U<7<' 4@7' A3CB7' A743A7<' ;<7D' @ ' + ' ' %' !
L33 ' , * ' 4' Q>?' @7A7' 4@>4' MA>@>= ' 7CB>= 67<' Q34@' @ '
4376@7Q' ' F4
' ' %' ' + * ' , % 4' = F<7A' Q>?' 'U&' Q>' 'FA' = 7'
C<' ?U>' Q>?' @3A' C7UU' 3FM>C')' >5@A' E8, 8 7'
83?4' 4A3?4A7 = $: ? ?87447 C<' 'FA' @3?' C7LFU' 4F87 ' >; 64' @* * ' '
' ' ' 3&M7&FL7<' Y7LFU7 ' 'A7BF = >UC<7' = 7' 4F' I FQ'
RA4' & ' ' ' ' ' 7AF' 4@ I' C7LFQ ' F&I >?' 4@ I'
VA>C4?3A7
' ;' = D A' " ' C +) ' KL3 ' +' C<' ?67B&>&I' 4@7' 7&&'
MF3C>??' ' UAA7 ' ' <4@>4' @3?' C7LF' Q>?') ;KDW +
J % %) ' ,, ' + % 7&BU = ' C7UF ' Q7&BU = ' <<3A' ?FC7' 4F' = 7'
IA=-' " ' ' ' ;333 ' K3L ' ; ' ' 5' % ' &>U<3U?'
'M7V>C' 4F' ?6738' 4F' @3?' ?>3<' C7LF ' 7A>A7' 3C' = >C7A' F'' 6A>I 7A&'
@7C' FCI ' <3?647??A7' ; AA<' N ' * $@ ' ! ' %) ' 3C'
J * ! * G' ' ;% ++5' *' F' = I' <7AA7?4' >C<' M7?4' M7&U3' '34'
76GUF ' 3&M7A4 ' >3?4?A' F'' >???3&?' ; 7D<') ' N ' 3C'
S3A84FC' ' ' ;% %*5 *9$@>L7' QA3447C' 4F' I FUA'C) LF' 4@7'
4A7?FA7A' F'' <3C' ;<KK' %' ' + / * ' ' ' ' ' 5'
F' 47&4' = 7' 4@>4' = I' C7LF' ?' BFAC3C[<FUC' 4@7' MUAC.?3<7
' >RA3' 6* ' ; UA47?75' ' ' I' ?FC' UV@' U&&7 I'
>C<' 3A' @F = >?' 3&47 I' = I' C7QFI ' %) , ' ' C% '
7<' U8?) '' U = = 7A?74 ' >C<' AF47B4FA' F'' @3?' 76LFI'
S3CV' <Q>A<' 4@7' 3K4 ' %' ; AD<' @ ' ; 34?BF&4375' * ' '
) * ' K ' ' 5' $ $ >Q3<' IC<?>I ' YU@F&?' C7LFI ' ?FC7'
4F' F@CC7' @3?' MAF4@7A' P74B R ' K K) ' I ' ! ' * ' L3'
>U<' IFUA' 67>B7 ' &3?FC\ ' Q>Z' ?67>83CV' 4F' = I' C7LFI '
' ' % ' ' J %+) ;7<' M4 KKL33 ' ' &7>4@7A.B>6 '
7<V7<' Q34@' A>FM34.83A ' FA' @7A' &3446?' C7LFI
7' K (F' ' 6* 'K + ' 4' ' F' <KC' '' A><' FA<' = I'
C7LI ' % '& ' ')%! B'+ ' A37?' 3CEFCU?' @3?' C7U37' M I'
@3?' MAF4@7A?' ?I<7' >6AV C' ' 7+% ' ' ' & ' ,+' F'
I = FC' @>&&I<>I ' = I' C7L37 ' >4;A+ 0' ' '+' UC8I '
7LI ' >C<' >4B@' VF' FC' >?' U?'U>&' Z94 -' # ' N &&'
999"" ' FFA' C7LI &7??' F&<' F&R' 94+4F-9' 2 (' $ ' ' L'
Q>96 K * %>3^' A7>&' =%!' 4F' '3C<' = I' C7LI' @>?' = ><7'?FV FF<'
>' B@F3B7
. ' : %&8"+!"' (77)' (7"&,' ! ' !%&' "78&/"!" 8 (!&
+ # $ (# &' ' 7&+" (+)"'
;A<D + ' % ' ! ' '33 ';% **5 + ' ! FA' C76@U7?' = 3V@4'
?>I' 3C' 4@F?7' <>&7??# I ! >4@7A ' ?@>&&' ' B>&&' I FU' UCB&7' Z[C<'
LCB&7?>&?F#' 1 FC' ' = U?4' B>&&' 4@7' 7' C76MU7 -' %)K*'
' ' ' % % +' @7' B@37'7' F'' 4@7?7' M>C3?@7<' = 7C' Q>?' 4@7'
'76M7Q' ;?F' 4@7 I' B>&&' @UAB@. = 7C?' M>?4>A<?5' F'' 4@7' >A]
<3C>&' >374>CF' eDD4;4' 2 ' ' ' % ' J 2 4
,K ' @7 I' Q7A7' 6AFM>M&I' @3?' C37B7?' >C<' C76@7Q?O>-B&??' F''
A7&>43FC?' F'47C' 6F???7??<' C' CU = M7A?' M I' 6A37?4?' >C<' = FC8?'
)96*' ? 'P: '<+ ' ' ' = '33' 2 ' FA7' 6>6>&' I C76@7Q?' [
@>< ' M77C' ?4>&&7<' >C<' = 34A7<' 3C' 4@7' CV&3?@' @UAB@ (
' ' ' / G B ' ! %G &' !%&' %:+. (#, ' $ ' (. ' !%& 1+'
' +"+!& 1+' , (: /%!& ' 2 1) - " , #& *%" ' "+'
"#!&#, &, ' ! ' %(=& ' !%"+' &7(!" #+%"
*' % (' % ' $ %0, ' 4' Q>?' CF4' M3?' '>U&4' 4@>4' I FUA'
C76@7Q.7&7B4' >=' CF4' ' FA4@>= 64FC?@3A7' YU3A7')9*9'
: ')& ')& ' KL ' @7' BF = 6>CI' >< <7<' 4@73A' 7C]
4A7>437?' 4F' 4@F??' F''@3?C76@7Q.3C.&>Q ' ' 3??'
' ' ' ' K ' % ' @7 I FU4@' Q@F' 6UA6F??' M73CV' = I'
C76@7Q.3C.&>QA
$' @ ' ' !%& 1+' +"+!& 1+' , (: /%!& ' (' #'&'&
) -+' 8 # ' * ' = ' KBL33 ' v>' @7' M7>U47' >C<' VA7>4'
L7A4U7' F'' &F43&<3?' C7U7Q7' 4F' UC<7M>)7*7 $ '
* ' ')* ' ' Z F' = I' C7LF I' >43&<3?' 4@>4' @7?' A3B@4'
3&&' >&&' CV&>C<' 3C43&&' @@A' '><7A3?' ?3B@4 ' $ @>&" = >3<' @F = >V7 '
' ' 1 ' 4A') * % - ' * ' , 3L ' KKK33 ' % ' @7'
4@7C3>C?' Q7A7' QFC4' 4F' = >AA I ' 4@7' MAF4@7A Q34@' 4@7' ?3?47A '
MU4' CF4' 4@7' Q3&@' 4@7' C;76@7Q
H 4 ' / (#,+ #' N 88 #"#>V!% ' I
' 2 ' < & '; F&?5' 3B@>A<' 3?' F' 67U7U' MA7B'
@7A7' 3?' C7887' @ / A' 4F ') '% +' & ' ' % $ '33 ' % ' @>4'
4@FU' ' >?4' ?7AL7<' ?F' 7C47C4&I ' &I' I ?' M&I C<7' C7L7Q7'
U&3<>' % *' ' ! ' '; F&?5' % ' B3&3F' >?3B>'
M7' VA774' B36?F' B% ' @77 4' '&A3B>=3?' @3?' C7L7Q7 ' 2KK?' ' @ '
' F * ! ' C& ' ' + ' ;% +)5 B 3H' 7' @>< ' I FUA'
C7L7Q7?' ?FCC7?F' IFUA' B@I 4<A7C ' =>AI7<' %(%' ' '
+ ' '* -' * $ 'L333 ' 7A4UFU?' C76@7Q7?' ' 4A3L = V' 3C' 6FQ7A'
4@73A' VA>C<' >4@7A?' 4F' 6>??' ' 3L ' >' @7' HFCV' ?B>CIU?'
' ' % ' >4UA>&&' B@3&<A7C' >C<' C76M7Q7?' = ' % ' B@3&<A7C?'
B@3&<A7C ' >?' Q7' ?>I' UC6AF673&I ' A>C<.B@3&<A7CR') / '
-' ' 3 / ' Z $ '3 ' @7' VA>C<= F4@7A?' >&?F ' &FL7' 4@73A'
C76@7Q?' M7447A' 4@>C' 4@73A' FQC' 3 = = 7<&>4?' B@3&<A7C ') / ++'
#' @ % % ' + ' = FCV' 4@7' >CB37C4' A778?' 4@7' C>= 7'
F ''4@7' A>C<'>4@7A' Q>?' BF = = FC&I' V3L7C' 4F' 4@7' 76@7Q
P' 9' ,)*' & ' ' ' 3L ' >' @7' HFCV' ?B>CIU?'
7LF' 4F' S3CV' >A<>C7' >C<' 4F' 7CU?' ' ' @ ('
* + ') ' * ' ' %+ ' 7 ' >?' C7LF(' >C<' >3A' M7' 6AFVA7?' F''
U = YU@33?' C<AF' F< @3?' VU3<?347') / ;+' ' ' '
% : B F >C7 = >C<7B7?>hM>U7>C<>C7' >'47A.MFAC7' FCC7'
>C<' >C7' 76@F I' F''@3?' '3A?4 M7VF447C' ;?FCC7' P7AB R
"E . N($I&' ' :+&I ' ,"/(7' 6 b'B
% ' 4 ' * ' -+ ' ' ! % ' 8?') OK' @I4.@7A' 4@7'
F4<7' @F&I' <FB4FUA?' >C<' ?>I CB47?' M7' M7447A' 4F' M7' M7&7U7<'
FA' 7&?' 4@7?7?' IFCV' C7Q' C>UV@4I' C76@7Q7?'
' ' ' '

3 F' ' # ' 3C' !) (+ ' % ' ' %)' F %5 ')* ' K ! 'M4'MUS' >AM&7 C76@A343B'>?@7?.' S]' J " # ' 6 ' ? ! ' , ' % ,' 4('FBBUA?' 4F' = 7' 4@>4'
' '* B. @7' 47A=' 1C76@A7B4F= I' (!3?'7 = 6&F I7< '>?' <3?43CB4' 4F?' L3F&74.BF&FUA7<' YU>A4E ' >C<' 6FA6@ I A I 76@A343B'>?@7?.' 76@A343B'>?@7?.' 76@A343B'>?@7?.'

8(!!&' &9!&#,"#ƒ !% :/% !%& F (&#'%)8($ (' 7&($' &+ ' !%& 8", ".

B(3) % % , + $ + (* $ ') (8 $ + ' @7C7AF7 ' ?3C7Q'FA'?4A3CV F'' >' &7>'7 ' >?' 3C' 6&>C4>3C7 ' %) *' " *+ 0-' C % ' ;%) 5 % *+' @7A7' 3?' >C' @7AM '4@7''C7AL7' Q@7A7F'3C' 4@7' =3<<&7' 3?' A7<' ?)*K' 4 ' 3C')) ' % ' *, '33 ';%) +5 = ' @AFUV@' 4@7' =3<<&7' F'' 34' AUC' 4QF' M&>B8' 4AF>&B?' FA' 7AL7?' 4F' 4@7' 4>&8 ' %*%>' 4A ' @ * $ ((' + ' K F @7' 7>L7?' >A7' ?=>&' >C<' VAFQ.' , 3CV M I' FU6&7?' FC' 7>B@' 3<7' F''>' 7AL7' FA' 3M ' %*) ' 1 'C ' @ %' ;7<' 5' ' * >' @'7C7AL7' FA' 877&' <F7?' CF4' 7K47C<'4F' 4@7' 7K4A7 = 34 I' F'' 4@7' &7>L7?' % 'O Œ H;P ' * ! ' C * ' ;% 5' %, ' '' F4@7A' L73C?' ?3 = 3&>A' 4F' 4@7' =3<A3M' 6>??' 'AF=' 4@7' M>7?' 4F' 4@7' >67K' F'' >'&7>' ' ?UB@' L73C?' @>L7' M77C' C>=7<' C7AL7?' %) ' ' ' ' : #' C ' * '333 '%+' @7A7' 3?' FC7' B7C4A>&' C7AL7' F''L>A3>M&7' &7CV4@' >C<' 4@3B8C7??' ' FBB>?3FC>&&I' 6AF%7B43CV' '>A' M7 I FC<' 4@7' 436' F'' 4@7' &7>' , ' $ 9 , " 3 Q'O # '@ ') ' F * ' , *#' @7'C7AL7?' F'' 4@7' Q3CV?' 3C' >@CF?#' >&&' 4@7' 3647A> ' >A7' 67A' 7B4&I' <3?43CB4 > ') ' N && O: ! -I ' ! A7CB@' ??C?7 ' 67A@ ' C7L7A' 3C' >B4U>&' CV&3?@' U?7 ' *>* . " ' ,) ' ? L ' 7AL7? ' 3C' >AB@347B4UA7 <7CF47' 4@7' = FU&<3CV?' F'' 6AF%7B43CV' >AB@7?' F'' L>U&4?' % , ' ' 3 '@ %) ' C+ ! ' '4@7' = FU&<3CV?' F''4@7' VAF3C7<' A3M?' F'' F4@3B' >U&4?' K /(6 44 ((0'*D') V ' ;7<' 5 , ' ' >' 47A = ' ?F = 743 = 7?' >66&37<' 4F' 4@7' A3M?' >C<' = FU&<3CV?' FC' 4@7' ?UA'>B7' F'' >' L>U&4 ' MU4' 34' 3?' CF4' 47B@C3B>& ,; 4' '$''. & ' .:#,7& $'$''. &#' ("+"#ƒ'$ 8' !%& . ("#' + "#"8 :7(!" # .)' =(" :+ 8&(#+' (#,' +& ='#ƒ ! ' ' #=&)' 8 :7+&#' N&+ ' $ +&#+(!" # ' 8 !" #ƒ' .&! *&&# !%&' . ("#' &!' ' (#,' + 8& !%& ' (ƒ $'!%& . ,) +> >' : ' ' -,' 3L' L3 ',% 7 4' @>' Q7' ' " A>3C7' 4@>&ƒ CFUA3?@7?' FUA' 7AU7?' +> >' ' , ' %' :+ ' C' I 7 ' 4@A7&ƒ' 'FA4@ ' ?F' >?' 34' @>CV7<' >' 6A744 I' <3?4>CB7' M I' 4&7' 3?U>&&' 7AL7 ' %))' Z3' *66 ($ '@& * ' ;% 5' , 7A4>3C' 7 6>34&?' >C<' = 7 = MA>C7?' Q@3B@ 3CLF&L7' 4@7' MA>3C' >C<' >&&' 4@7' C7AL7?' * +' ! ' 8& ' ! ' F, $ ' ;%*%%5 , ' U443CV' F'' >' 7AL7' >&Q>I?'B>U?7?' 4@7' Q>?43CV' F'' 4@7' >A4' 4F' Q@3B@' 4@>4' 7AL7' &7><?' %*+' ' :' ?' 4@7' C7AL7?' >A>' C?4AU = 7C4?' F'' ?7C?>43FC' 34' 'F&FQ?' 4@>4' ?6>?= ?' C' 4@7' C7<<&7' ?' = >I' 6AF<UB7' >&&?I = 64F = ?' E MF' B ! : ' ' ' + ! >&&F63U?Q>?'4@7' '3A?4'Q@F'<3?43CVU3?@7<' 4@3?' C7AL7' 'AF = '4@7' 6AF67A' C7AL7' F''4@7' LF3B7 ' + > ' " @ ') '@ ,) * ' k% *,5 ' 33 ' 333 ' , *' ' C7A 7 3?' >' 4@A7><' F'' UC?4>M&7' C34AFV7CFU?' ?UM?4>CB7 >&FCV' @3B@ 4@7A7' AUC?' >' Q>L7' F'' = F&7BU&>A' @>CV7') 96*' 4 ' $ ' % ' @7'?63C>&' C7AL7?' >A3?7' 3C' 6>3A?' 'AF = ' F66F?347' ?3<7?' F'' 4@7' ?63C>&' = >AAFQ ' ## #F+'"&#!"$"' :+&' *"!% &$& &#'& ! ' $&&?7 "#/' ' : (/&'&!' K)FK "' Q '@* % ' C4AF< ' 3V@4 ' ?>&U47' 4@77' MU4' Q34@' QFUC<7<' C7AU7?' %*+,' " ' + ' 3L' >' @AF] = >43B' 4FA4UA7?' ?FFC' ?@>&& ' "A7>8' >&4@73A' C7AL7?' >C<' A3447A' >&4' 4@73' C7C??' %*)+' <' % ' , ,)' @F?7'&FQ7A?' 4@>4' >4B@' 7L7AI' C7AL7 ' >C<' L3MA>47' 4@AFUV@' 4@7' A>= 7 ' % ' 4 ' ! $ ' ' %'% ' F4' 4@7' 3447?4' BF = 6>C3FC' 3C' 4@7' QFA&<' 'FA' >' 67A?FC' F'' IFUA' &>< I?@36 ?' C7AL7?' ,9-' # ' : % ' ' *' % ' @>4' 8CFQ' Q7' F'' 4@7' ?7BA7 4 F''>' = >C'Z 3?' C7AL7?' Q7A7' QAFCV' % * ' $ ' / ')' 7' ?F&<37A?' C77<' C7AL7?' F''?477 &\ F ' % ' - ' B R '- +> +Y ' ' & ' - ';%*+*5' ' , ' @7'6F&343B>&' 7AL7?' >C<' A47A37?' M I' Q@3B@' 4@73A' ?7L7A>&' >A4?' '>A7' UC347<' 4F' FC7' >CF4@7A ' + ' +' $ " ' %6 0 ' + *' @7' U?7 ' 6FUA?' >'?7C?3M3&3 4 I' <3L3C7' &FCV' 4@7' C7AL7' F''7L7A I' '77&3CV' ' >' #' ' % 'B' @ % ' ?' ;% 5 %,)' @7' C7AL7?' F''4@7' '>34@' F'' ?A>7&' Q7A7' CF4' UC?4AUCV ' ' -' 8& '@ -' J ' (' % ' ' C' '77&3CV' 4@7' 6U&7?' F' 4@>4' 6UM&3B' @7' @><' >?' >' VU3<7' 4@7' = F?4' ?7C?343L7' F'' C7AL7?#4@7' 6FB874 ' / ' ,"+ ,& &,' #& = :+'+)+!&8 '#& = :+#&++ % ' /) % * 'T 64- ?' 4F' @3?' <!3CV' F'' 1'C7AL7?' ('4@>4' 3?' >' ?4FA I' ?UA7' 4F' M7' B3AB U>4?' <>CI MF<' I' Q@F7?' &3 '7' 34' 3?' C7B7??>A I' 4F' VU>A<' + ' ' 3 ')* ' %/ / ' - ' $ % ,*' @>4' 4A77 ' >&Q>I?' V>L7' = 7' >' '34' F''C7AL7? & = :+$". & % ,+*' * !) ' ' % ')0%' @7'3C' &U7CB7' Q@3B@' C7AL7' 7K7A4?' U6FC' C3U?B&7' 4F' 6AFLF87' 34' 4F' BFC4A>B43FC' % *' ' & ? #' G' ' = ' $' C * ' , *' 7>?7' FU4' >' M4' F'' '37?C' C7AL7' 3C ' ?F<3B' B@&FA3<7 : ' 5%4' 4 ' & #' '%' 7 ' ' FUA' >< I?@3&?' BFC?434U43FC 3?' 3C' 3C347&I' <7&3B>47[' C<77<' 34' 3? &' > = ' C7AL7' >&&' FL7A' \[3 /' '@ /'0 0 '3';% *5 * ' >U&' ?77 = 7<' 4F' M7' >&Q>I?' = '>' ?A>47' F'' C7ALFU?' 47C?3FC ' 7' 3?' >&&' C7AL7[' 4@7' 7C743>C' = 3C3?47A QA347?F''@3 = ' 4AUT' \ % * ' :' @ ' + ' KKL33 ' +)' 6' IFU' 4@3C8' IFU' @>L7' C7AL7' 4F' BU4' 4@3?' @FF8' FU4' F'' = I ' 3CV7AZ D '%V 6?(#,' *$6' ?' !! " . : !"=&' (+' ' 0 %) B' 0%) *' B' 06 %') 0' 06+ 6' 06+ ' ! ' 0) % * ' &!' (@7'CU = M7A' F''?UB@' BF = M? '?7>6 '3C' A7B7C4' = 7<3B>&' QFA8?' 3?' L7AI' VA7>4# FC&I' ?F = 7' F'' 4@7' 7>A&37A' FA' = FA7' 6AF = 3C7C4' 7K> = 6&7?' >A7' 3&&U?4A>47<' @7A7 ' % , ,. +' F'' 4>7?C?FAI' C7AL7?' B>C' A7>< &I' M7' 4A>B7<' 3C' 4@7' = 3K7<' -C7AL7.MA>CB@7?' + ' ' G'C : ' ' $ ' - ')* ' @7'VA>CU&>A' = >?? 3?' 6AFM>M&I' >' ?7C?F (' -C7AL7.MU&M ' É96/' $ ' 'B' @ %) ' !' B * 5 2 ' @7')*' ') 43??U7' F'' 4@7' NC7AL7.MUC<&7?' + ' ' G'C : ' $ ' - ' ' L7C4A>&' ?3CU?' &F<V3CV' 4@7' NC7AL7.B@>3C' ' F * (' * / ' / ' * %' @F?7' Q@F' ?4U<I' NC7AL7' <3??>??' *' 4A ' * 5 (' $! / ' +) ' AVF<UB3CV' 7'' 7B4?' 3C' 4@7' ?>= 7' NC7AL7.7&7 = 7C4 ' *' < 'U' ? ' % ' ! ' % ,' 4' 3?' <FUM4'U&' Q@74@7A' 34' >''7B4?' 4@7' = F4FA' NC7AL7.7C<?' ' ' ' G'C : ' $ ' - ' + ' @7'>C47CC??'&F<V7' 67BU&3>A' NC7AL7.7C<3CV?' % ' < ' '%%' @7A7' 3?' >&A7><I>' = 3C<' 4F' >447C<' 4F' 4@7' NC7AL7' 7KB34>&3FC ' ' ' '33' % ' @7'3C47AC>&' &>I7A' ?'BF = 6F??<' F'' <7&3B>47' NC7AL7.'3MA3&?') *' * ! ! ' ,) ' % ' ' +0%' @7' NC7AL7' 3&>= 7C4?' >A7' ?3 = 6&I' 6&>B7<' 3C' HUK4>.6F?343FC ' ' ' $ ' - ' % ' @7' B@>3C' F'' NC7AL7' V>CV&3>' (% * ' 8 :'3C' $ ' ' ' @7' B>U?>43FC' F'' BFC?B3FU?C7??' MI' NC7AL7.' = >447A' (6 ! ') ' @7' NC7AL7.= F43FC' 3C' <3?>667>A3CV' 3?' ?3 = 6&I' <3?4A3MU47<' 3C4F' F4@7A' C7AL7.= F43FC?>' % (' ' 122' ' ! ' -C ' 333' +%' ' C74QFA8' F'' BFC4AF&&3CV' '3MA7?' 8CFQC' >?'>' NC7AL7.6&7KU?' ' &?#' G' 4 ' $ ' C * ' ,+%' 3L3<7' 4@7' NC7AL7.AFF4?' F''4@7' ?63C>&' BFA<') * ' ! ' ,) ' % ' ' 0%' "FUC<4FV74@7A' MI' '3MAFU?' = 7 = MA>C7' 4@7' NC7AL7.?@7>4@' % +' ' ' ! ' ' ' % ;% ,5 %, ' @7' UC34' F'' ?7C?>43FC' 3?' >' NC7AL7.?@FB8' >' ?47 = ?' >A7' F'47C' 3AA34>47<' ' >' % ' ' ') % ' *') ' % % F = 74@3CV' &387' 4@7' 1NC7AL7.?4FA = ' F'' = 3VA>3C7' ?Q76¢ 4@7' = 7<U&&>' FM&FCV>&>' (+ ' U' C ' ' $ ' ' ') 9*)' P & ' * '%%M' @7' F67A>43FC' F'' C7UAF4F = I ' FA' NC7AL7.BU443CV ' *' ' 0 ' $ ' J ! -*G ' % @7 I' = U?4' BFC?7YU7C4&I' @>L7' VA7>47A' MFC7.?= >?@3CV' >C<' NC7AL7.<??7FA&L3CV' 7''7B4?') -.' # ' ' ' ' *'' @7' NC7AL7.<3??F&L3CV' = 7&F<I ' ! &U447A[<' @7><&FCV' 'AF = '4@7' ?8I % *' #' * !%,' *'' % *!%),' @7' ?FUC<?' >A7' A>4@7A' 67>B7.V3L3CV'4@>C' NC7AL7.3AA3>43CV ('% *' * ' B4' *+' @7' C7K4' NC7AL7.A7C<3CV' ?FUC<' 3 (3B@' = 3V@4' FBBUA' K (' (CAQ/' *' 7 ' ?77 = 7<'4F'M7'7L7C' = FA7'NC7AL7-' C<<7C'4@>C' U?U>&' + + ' ' ! 'K333 ' 7C' Q@F?7' ?63A34?' >A7' NC7AL7.?@>87C ' 43 = FAFU?' >C<' UC7C47A6A3?3CV' % *' 4 #' 5 #' J ' -)%' % , ' UA3CV'MA7>8'>?4' @73A' BFC<UB4' 3?' NC7AL7.?@>83CV' % * ' ' F * (' * / ' (' @3?' B>?7 Q>?' 4A7>47<' MI' N67AL7.?4A74B@3CV' K 9 [' ' & ' /*' (' / ' *+ ' ;% 5 %*' @7' = FA7' NC7AL7' 4AI3CV' CF\(' F''>' 'UFUC<7A3CV' ?4U = M&7' FL7A'>' @7>6' F''?4FC7? >@' &''(7 ' 8 .+'(' +#& =&F (#(7'F'(=") -'!%& :7 F'(=")' $ (' ! !%' #&!=&F &77' #& $' !%& '&77+' ' 8 +"#ƒ' !%& ' &77 :7(' &7& 8&#!' $ #& = :+ !"++ :&' (7+' % 6 0' #& =&F &(! &' (/ : ' $ /(#/7" #ƒ' &77+' , +&7)' ' ###&'!&,*'"!% #& (# !%& ' (#,' (++ '"(!&,'"# &' $ 8"#ƒ' + 8& $:#'!" #' (7+ - 0' 9 % 0%* J%3N' 0 ' 0' #& =&F ' (' ' $' #& = :+ !"++ :&' #& =&F,&($#&++' ,&($#&++' :&' ! ' ,"+ ,&' $!%& (' :+!"' #& =&\ #& =&F $". & ' !%& $". :+ 8(!!&' 8 +"#ƒ !%& #& = :+ +)+!&8 ' #& $!%& !% &(, 7"B& :#"!+ $!%"+' #& =&F$ '&' !%& $ '&' +: +&,' ! ' &7". & (!&,' "# #& =&F'&77+' #& =&F/7 :& ' &# /7"(' #& =&F "#+! : 8&#!+' ,&#!"+!+!"#+! : 8&#!+' $ &9! ('!"#/' ' ,&+!)"#ƒ (' #& =&' $ '7&(#"#ƒ :! !%& #& =&F'(=!)' N #"/%!' >4VRf' #& =&FB# !' (' / (#? /7" #' (7+' - #& =&F#&&,7&' %4 (# +&+!%&0 F 8&!& K6&4 (',&#!(7 "#+! : 8&#!' N+&&!%& O: !' $ ' 0)%'% 40' !#& =&F 77' (# "7 $ ' +! ("#&, +"#& *+ 2-6 4 0 #& =&F (+!&' (' (+!& :+&,' ! ' B"77 !%& #& =& $ (' ! !%' #& =&F 7(!&' (' ,"+BF"B& !& 8"#(!" # $ (' #& =&' #& =&F "#/' !%& #& =&F ' ,+ (#,' /(#/7"($ 8"#ƒ (' "#/ :#,!%& &+ ? %(/ :+ "# * 8+ (#,' !%& ' (#"8 (7+' #& =&F ! (B' 2!%& 77&'!"=& #& =&F$". &+ *%"% :# !% :/% (!+ $!%& '&#! (7 #& = :+ +)+!&8 ! ' (' ,"+!(#f' ' 77&'!" # $'/(#/7" #F'&77+!2 ,!' *) ' 3 >43@!' + ' #& =&F! (' ! ' #& =&F! :#B' (' 8("# +!&8 ' %"@$ #& =& ' #& =&F! : .& ^' + ' #& =&F! : ,& ' #& =&F! : #"' ' (#"#=&+!"! : & $ #& = :+ !"++ :&' #& =&F! * 7/ ' #& $!%& :7!"8 (!& (8"$"' (!" ##' $('#& =&' #& =&F * "#/&,% '%(="#/' *"!#/+ 8(B&, ' "!%#& =&+ % *?' 5 ') '%,%0,' + 0' ! '>' 4FF&' U?7<' 'FA' MAF>B@3CV' FU4' 4@7' -C7AL72>&' 6 ! ' ? L ' * ' + $ ' ' C?4AU = 7C4?' 'FA' 7KB>L>43CV' >C<' 3&&3CV[[C7AL7.' B>L3437?' * ' * ' 8 ' @ , * ' % ' 3' % ' @7' [[C7AL7.' B7&&?' >A7' 4@7' FC&I' 6>A4?' B>6>M&7' F'' V7C7A>43CV' 4@7' C7AL7.'FAB7' % ** &? #' G' 4 ' $ 'C * ' ' %& C7AL7.B7&&' &>I7A' %) ' ' @ ,) * ' ;% * ,5 $ % ' L3 ' 3 ' @7' oC7AL7.B7C4A7' G>3B@' ?' 4@7' ?7>4' F'' 4@7' ?7C>43FC O ' / # ' $ ' * $ $ &' B&' ' +% ' >&&' 4A77#' 3?' 4@7 $ A7>4' C7AL7' B7C4A7' F'' >&&' = 7A3B>C' MUCC7??' % ' #C : ' ' $ ' - ' %% ' @7' MUBB>&' = >??' 4@7' - C7AL7 ' BF&4>A' >C<' 4@7' BF_U = 7 &>A' = U?B&7?' % ** &? #' G' 4 ' $ 'C * ' % ' 7>?7' FU4' >' M34' F' ' A7?@' oC7AL7(' FA<' 3C' Q>47A' % 6 + - ' ' ! ' ' I = 64F = ?' F'' n 7AL7' <7>'C7??' % **+' * ! ! ' ,) ' % ' 0%' 7 = >8'>C<' F4@7A?' <7?BA3M7' 4@A77' <3?43CB4'6>A4?3C' 4@7' nC7AL7' 3MA7 % ' ' B' * ' H 33' :' , ' @7' BFC<UB43CV' 6FQ7A' F'' C7AL7 '3MA7 % *,' &? ' @ , * ' ,%' L7AI' 'A>B43FC' F''>' 4FC7 '3?' A76A7??C47<' MI' 34?' ?76>A>47' C7AL7.'3MA7' % % " % ' ' @ , ' ;7<' ,5 ' @7' -C7AL7.'FAB7' ' = U?4' M7' >BBFUC47< '>?' 4@7' @3V@7?4' F'' >&&' 4@7' 'FA = ?' F' L34>&' 'FAB7' % **' ' ' C * ' % ' 3&' ' @7C' 4@7' C7AL7' 'FAB7' B7>??7' 4F' >B4 ' >&&' = >C3'7?4>43FC' F'' 4@7' 6A7??CB7' F'' = 3C<' B7>??7' % * ' $ ' ' ! ' B' C ' &3 ' , ' @7' B7&&?' >A7' 6>B87<' 4FV74@7A' 3C' >' V&U43CFU?' ?UM-' ?4>CB7 ' Q@3B@' 3AB@FQ' @>?' C>= 7<' NC7AL7.V&U7' K (' @ ' ' ,) ' ' ,%' @7' C7ALFU?' ?I?47 = ' F''4@7' >A>B@C3<>' 3?' V>CV&3FC3B ' BFC?3?43CV' F'' NC7AL7.8CF4?' %' %4' % (' ' ! 3, ' %, * ' % 6 ' '%%' >?47AM3<V7' Q>? MU4' 4@7' 6F&7 ' 'FBU?' FA' C7AL7.8CF4' F'' 4@7' ?UAAFUC<3CV' BFUC4AI' &3'7' %) *' " ' * + -' C % ' ,%) 5 ,*#' CF3C4' @3?' MF<I'>&&' FL7A' Q34@' N 7AL7' F3&' % ' ') ,) ' C ' % *0%' 4A>C<?' BFCC7B43CV' <FA?>&' NC7AL7.6&>47' Q34@' FU47A' Q>&&' F''BF&&>A' % * ' ' F ' 6%+ (' * $ / ' % ' C F' 4' 3?' B&7>A' 4@>4' 4@7I' A76A7??C4' ?7C?FAI' FAV>C?' 'AF = ' 4@73A' 3C43 = >47' BFCC7B43FC' Q34@' 4@7' NC7AL7.A3CV ' % **' ' 8 @ , * ' %%%' ' ++' @7C'4@7'>C47A3FA'AFF4?>A7'BU4' 4@7' = F4FA' C7AL7?' >&FC7' <7V7C7A>47 ' >C<' B>C' ' ?3 = 3&>A&I' <3>VCF??<' 3C' >' = 3K7<' NC7AL7.4A>B4' % %' ' ' % ' @ , ;7<' ,5 +) ' ''>&&' 4@7' NC7AL7.4AUC8?' ?U66&I3CV' 4@7' FAV>C' FC' FC7' ?3<7 M7' <3L3<7<' % (') %) %) ' C' <'& = = >43FC' F'' 4@7' C7AL7.4AUC8' FA'3&?' MA>CB@7?' $.+*' * ! ! (,) ' % ' ,0%' 4' 3?' 7L3<7C4' 4@>4' 4@7' BFC4>3C7<' = >447A' F'' 4@7' NC7AL7.4UM7' 3?' 7K4A7 = 7&I' ?F'4' % * ' F * (' * / ' / @7' C7AL7.4UM7?' F'' 4@7' Q@347' = >447A' Q7A7' C>4UA>&' % ' ! ') %) %' &' @7A7' 4@7A7' 3?' >' B@>CV7' 3C' 4@7' NC7AL7.4UMU&7?'4@7 = ??&L7?' % ' ') ,) C ' ' % +0%' C' 7&FCV>47' >C3 = >&' Q34@' >' 6&7K&'FA = 'NC7AL7.4UC3B' % ' 6+ (' ' ! ' ' ' 'Q7' 3C< '4@7' NC7AL7.4Q3V?' F'' 4@7' &3 = M' >'7B47<' % +' ' + ' ' * + ' 7B' **+,0%' @7' Q7&&. = >A87<' NC7AL7.Q3CV7<' ?F&34>AI' >C4.&3FC & = &' N#+0=I' ' 7+ ' R' #& :&' #& $' Z # +&#+&' " ' (, ' ' ' 'N ,&&' * $ / 40' !%& *"+& $ 8' !%&' + . \ ! 7 ' , * ') ' ' #(8&#!' *"!% !% &(, +' ' #(!-' .(#, +' $+ 8& 8(!& "(7' 6 ' % ,7; ' & ' @ % ' * ' ' K&L33' FCI' 7C4A>663+' ?473<' Q34@' ?3&83?' ?73A' FCI' 6>44A7&&' C7AU34' Q34@' VF&<' ' 4>&<' % ' ,)) ' ! ' ' % ') * ' ;% 5' ' ,+' ! FA' 'FUA7' 7&C3?' M&>8' 4>'' >473?' 4@7' C7AL7' >C<' V734' 4@7 = ' PA(' @??R' % ' >' ! '3C 34B>3AC' $ ' % ' ' ,*)-' C7'6>3A' F'' @F3?7 47 = 'FA' 3#' 7&C3?' 4>' ' >47' 4F' <4>Q' 5E3 = 7' >C<' C7A'' H(>= 7 4' ' /"=&+! &#/!% ' ="/ : ' ! ' N!%&(8' &!' I %' V;A' ' ' ; 5' @FU ' &>?4' A7 = 7C<FU?' VF<<??? C7AL7' '&3'47<' >A = ' \ ) 6+) ' ! ' * ' C * ' % ' ! @7' = 3CV&3CV' BUAA7C4? 7AL7' 4@7' ?4AFCV' >A = ' >C<' 43CV7' 4@7'M&U?@3CV'B@778' %'+ + ' ' #' ') >*' ' % $ ' FQ' &FCV' Q3&' @FAAFA' C7AL7' 4@3?' A>= 7' F'' B&>IZ') 96 ; ' % ! ' 'KL.% + 7' C7AL7<' 4@73A'&3 = M?' 34@' L3VFA' 7L7A' C7Q - ' %)' ! ' ' % ' % + B' ' VFF<' QA347A = >87?' @>?47' 4F' B@>?47C' >C<' C7AL7' @3?' CV&3?@' = FCF?I&&>M&7?' % *' $ ' ' ! ' 3L' * 2 ! UA4@7A' 4F' C7AL7' @7A'6UA6F?7' 4F' &7>L7'4@3?' QFA&<' F'' 4@7' ?UC# 5 ' '"8.:&' *"!% ' : (/&'! ' &8. 7,&# + ' % ! , ' * -' ' L' K3L' @7' QFA< ' C7AL7?' = I' @7>A4' 34' 477&?' = I' ?QFA<' * ' < ' F ') ' 33 ' KKL36' ;%) ,5 ' (%+' 7' 3C<' 4@U?' 4@7' 4@7C3>C?' C7AL7<' U6'4F' 4@7' 634B@' F''A7?33>CB7' ' ' ' ;' F' = UA=UA' F''3C<3VC>C4' A(U<&>43FC' C7AL7<' @3 = '4F'>''UA4@7A' 7''FA4 %6 * ' >4;@ 0 # ' \ % ' * ' ' H 333 ' F ' = UB@' 4@>4' Q>A = 7<' >C<' >C3 = >47<' >C<' C7AL7<' K4FF'0 $ ' ' ' ' C % ! -* ! ' "A>B3CV' 7??7CB7?'4@>4' C7AL7' F' Q>34' 4F'<>A7' 4F' ?4A3L7' J ' - ' N(7+ ' *"!% $ ' ! ' &! ' I +(+' "L&3F4@' G* ' *) ' 3 ' 7' @>4@' C7AL7<' @3 = ??&' ' C<' CF L' <7'37?' 4@7 = ' 2 ' 0 # ' Z 3' ' 333-' % 4@3C8' IFU' @>L7' M77C' CFQ' ?F = 7' I7>A7' C7AL3CV' IFU&' = 3C<' 4F' 4@7' 7K7A43FC' ' ' #' ') ' % 3' KKL33 ' ,%,' 3?' 7K6A7???FC Q>?' 4@>4' F'' >' = >C' @F' Q>?' C7AL3CV' @3 = ??&'' 4F' M7>A' ?F = 7' VA7>4' &AFUM&7 H' ' ' ' ' ' ' ' +%' *' +"/#+' $'#& = :+#&++' 6 + ' +' 4A ' F%6 ' ' ' + 6 ' ' % ' *' &???' 4&37' @FQ' <>A8' 34' 3?' I) U' FUV@4' 4F' @>L7' M><' &> = 6?' % F = 7' B@3&<' @FQ' IFU' C7AL7' % & = &, ' N#(0=, I HHH ' Z$' 9 #, ' d 4 I $' C * ' $' 7&(=&+' (="#/' (' #& =& ' #& =&+' ". . &, ' 7+ ' "# ' 8 . +' (+' * ' 0'- 0' ! %) ' ' ' ' ,)+0%' 7>L7>?' 7C43A7' FC7' C7AL7<' ?= FF4@' L73C&7??' ' 0 # ;% 5 $, ' ' &7>' 'Q34@' ?UB@' >C' >AA>CV7 = 7C4' F'' 34?' L73C?' @>?' M77C' B>&&7<' >'C7AL7<' &7>' ' ' ' ' ' '

%'% '@ ' 3'? / ' P'AF=' , *6'KK3K '3 R' B'3C' = 3CU = 'C7?47' C7FM7< B7F??' '@77&7' @A>Q7A3V ' %'%, , ' ') ' @ ' % +' 67F?' P>CBA7CR' 3C' ?QUB@F' C7?47' = UQ7C' @>MM7C' @7A<7'A7?47 ' 6 ! %)' 3 3C7' $3C7 @7FA47 ' $7'43?' F<7?'C7?4/ ')'% * ' + * ' ' , , ') ' ;! >3A'1 '5' FAC7 YU7A7' ?>&&7' Q7' 6>C'A7?4 ' YU7C' Q7' =>3' C>UA7.YU7A7' 3C<7' >'C7?4 ' % ,' 1 # % *6'33' ' FF' 4F' @ I = '4@>&' V>< A34@' 7431&' BFU7343??' 4F' @?=@FU? '4@>4'@3?' C7?4'M7' 3C' @77H' %+, ' 3 (' $? ' ! '<' B&KK333 ' @>4'6&>B7'4@>4'4@FU' B>=' 'AF' ^U@3B@' 3?' 4@ I ' '3A?4' >C<' L7AA>I' 6AF67A'C7?4 ' %), ' # $ ' @ *- '+-' / ';%) *5 + ' U?M>C<7 ' ' QFU&<' Q7' Q7A7' 3C' FUA' C7?4 ' %)" ' ' < ' # ' L ' ' ' &344&7'BF44>V7 ' &387 ' ?F = 7'6FFA7' = >C[?C7?4 ' %*,)'@ ' '(' & ' ' - '% +' FQ' 4F' A>3??' 4F' I FUA' ?7&U7?' >' VA7>4' >= 7' >C< ?4>4?' 4F' 7K>&4' I FUA' ?7+2 ' %* +' $ =' ' % &' 3 ' , *' $ B>&&7<' 4@7' &FQ.AFF'7<' &F<V7' 4@7' 7>?>C4[?' ' 7?4 ' % (,' #' '-%' B')*) * ' '%%' @7'&3V@4??4' Q3C<' Q>?'3C' 34?' C7?4 ' @7'47 = 67'C3<' 34?' @F = 7 ' %) ' $ ' ' UV ' C' FC7' F''4@7'4@3A<.'&FFA'AFF = ?'F'' = I'@F47& ' >'C7?4F''UC?6F447<' 43<3C7??

' ' 7('& "# *%"'% (' !%"#/' "+' 7 , /&,' ' ,&? +"!&,

% ' " ' ! $ * ' ' , ,' @7' 7KB7??3L7' @C3&<3CV?' >C<' C77<7&7???' C7?47?' F ''= 7C?'4A7>?UA7?' ,) ' . ' ! % $ ' ,, ' 'H ' F'FM?7AU7 ' Q@>4' B>U3437?' C7?47?' >C<' A7B764>B&7?' 4@7' @U= FA?' <F7' 3C<7' 3C' 4@7' 6>A4?' %) *' ! # ' ' $ $ L33 ' , % >83CV' 4@7 = 'P = 7<>&?R' FU4' F ''4@73A' A7?(B43L7' 7?4?' >C<' FB>&3437?' ' , +,' (' @% - , 3L ' % ' @73A' <AFQ?!' CF??7' <AFF6[<'>&Q>I' F' = 77'4@7'M7>A<[?'>44A>B43L7'C7?4 ' ! ' ' &' #'' %-' 6 ' % ((B=

AFM '>' = 3?4A>C?&>43FC'F'' ! ' ')& , ' >'47A'4@7' LM ' ')& '4F' C7?4 ' 77' >&?F' 3

E<' 3 J ** ' - ' ; 5' * F' A' >B8?FC' 'TA' =>87&CV' 4@7' C7?4' F ''4@7' 83CV[?' 63B4UA7' 3C' 4@7' 3MA>A37 ')' V 7('& "# *%"'% & + #+' $ (' '& !('# '7(+# / /' !%"&=&+' . .& + ' " (!&+!' %(=&' !%&" ' :+ : (7 &+",&#'&' & + ! ')'%)' & ' *$ / ' '@ ! ', *' >4' 4@7' 'A7A7' ?77' @7A' 3?' 4@7' C7?4' F ''!A7A7?' 3C' 4@3?' 6&>B7'\ )7 ; ;=. ;' & ' @ * $ ' KKK33 ' + ' ZFUA' MUAV@' F''M7VV7A3?' 3?' >C7' C7?4 ') ' < % * ' ' * +#% @7' 83CV' F'' CV&>C<7' QFU&<7' CF4' @>U7' ?U''7A7<' 4@7' ! A7CB@' 8 I CV' 4F' @>U7' MU I &<7<' ?UY@' >' BFU7A4' C79&' ?F' C7A7' @3?' 4FQC7' F'' >&3B7 ') /)6' 4 # ' ' ' , (' 7' @><'A>E7<' 7C ' L3CV4F43 ?' >?4&7 ' >C<' Q@3B@' MF4@' @><' M77C' C7 ?4?' >C<' ?4>A43CV' @F&7?' 'FA' 4@77L7?' >* ' ! % ' 0/2 ' % ' @>4' @UAB@'F ' F = 7' 3?' >'Q3<7' >C<' ?6>43FU?' C7?4 ')6-6' : '3C' >CQ>I' % ' A*9,5 ',O' L3 ',) ' @3?' 3?' ?>3<' 4F'@>L7' M77C' 'FA = 7A&I' >' C7?4[F''AFMM7A?')66/' < ') '6-' K' , ' @7' Q7?47AC' >C<' = FUC4>3CFU?' 6>A4' F '' 3&B3>' ''FA = 7A&I' 4@7' C7?4' F'' 4@F?7' < (3CV' 6 I A>47' ? ' % +,' $'C 6 ' ' ' / 'KK4L ' 7A7' 4@7' 'A3>A?' ?43&&' 3C' 4@73A' C7?4' >MFL7' 4@7A7 ')9/+' 8 ' * $ ' * 7 ' ;% * 5' $$$'K33 ' , ' @7' @3&&.'FA4A7??' M7B>=?' >' = 7A7' C7?4'F;''AFMM7A?

. ' 7('& 7 'O:(!&' "# *%"'% + 8& +!(!& $!%'#/+' O:(7''!)'&!' 'N&+ ' $'(.,'B"#,I''+'$ +!& &,' '"+ &=(7&#!' ('%(:#!' - 7" 8&' ='"&' '!' - - *)' < ' ' 'F ' ; AM 5') ' (< ' Q@3B@'3?.' @7' C(>4 F''?4A3'7 '>C<' CFUA3B7F''<7M>47 ' % ' * $ '+' , ' 'O' 333 ' % %@$' @7>A7' ?F = 7' CFI?7' >< I ' BF = 7' 'AF = ' 4@>4' C7?4 '' <7>4@ ' BFC4>V3FC ' >C<' LC>4U>&&' ?&7 *67' %)+,' % %%$ % *' ' B>AB7' FC7' 3C' >'&FCV' 43 = 7' V>?4A7<' FU4' b F'' @3?' C7>?4' F'' 'FA = 7' FA' 6AF'>C7C7??7 ' % * ' 8 @ % ';% 5 3 F <=>?BU? (@7' @><'@7>A<' Q>?' CF(4@7' QFA?4' C7?4' F''4@3?' @>4?'U'<7&U?3FC ' 3 ??! ' & ' J %,' % ,' * ' @7'.@3&'3?' >' L7A I' C7?4' F ''AU = FUA?

' ' &#: 8 .&' $.'' ,+' "#+&'!+' ' !%&' (#'' 8 (7+' ' ':)"#/' !%&& (8& #&+!' $ %(.''!(!" #' (. ' +* (8' ' 7 #)

)' %+* ' ,' ,' &B '+-' F ' ; >K4F '%+* ' FKM ' A76A 5 ' ' C' 7A4@7' F ''' FK7?'4 '37?47F'' A>M7443?' %) ,' (' R" @ ';3)#%5 +' @7A7'3?' >' C7?4' F4' B@3B87C?' % (' % 0' 7 + ' 5' 3L ' @7I ' ?Q7&&' >4' @3=' Q34@' 7CU37' &387' >' C7?4' F''' FU&7' F>%?' %) (' ' @ ' ' * ' ! ' 3) ' ' 7C' Q3&&' M7' Q>AI' @FQ'4@7 I ' 6AFLF87'>'C7?4' F'' Q>?67?' %*,*. ' ' G - ' ' ' >A ' FQ' = UB@'4@>4'C7?4'F'' FAC74?' >A7' = I A7V>A<' Q3&&' 7>?3&I' >667>A' 4F' I FU ' %*) ' ' 3C' @ ' % ' && '+,' @7' UC<U&>43CV' = F43FC' F''>' U7?4' F'' B>47A63&&>A?' ?Q@7C' B&3 = M3CV' 4@7' 4AUC8' F'' ?= C7' L7V74>M&7' % % 'D,< : P F' # ' ' * $ * ' KL3 ') ', ' C7?4' F''>C4?' <3?BFL7A7<' >' B4F?74 3C' Q@3B@' BFC??AL7?' Q7A?' 8764' K 4' ' ' ' ' /& ' '33 ' R' 3B7' >' C7?4' F'' I 7&&FQ' B3447C?

' ' #: 8 .&' ' 77&'!" # $ & 7&-' &+ ' $!%&+ (8& '7(+#' ' $ &O : &#!"#/' (' ' 8 8 # & ! 8? 64 L ' @0% ' G ' %) ' ' 4' Q>?' = H7' F'' I FUA' C7>?4 ' 4@>4' QA34&'4@3?' 'FA' >'&FU7' &7447A ' %) ' = (Q ' % [$ '' * 8?' ;% +5 , * ' ?@>= [<' 4@>4' FUA' QFA&' <CFQ '>B>C' ?@FQ' 7?4?' F''C7Q' 7A>6@3 = ?' @7A7' M7&FQ' %) ' O & ' C - ' ' ;% ' @3?' Q778' >' Q@F&7' C7 4'F'B&3667A?' Q7A7' <3?BFL7A7>' M I ' FC7' = 34@' 3C' @F67?' 4F' V 74&' >' 6>A<FC ' *,4 ' ' % ' ' F ' ,'N V@6\' KFK ' @FU&<' B>&&7' 4@7' H (< 7 ' UC3L7A?34 I ' F'' K ' FA<' >' C7?4' F'' 'FF&?' 3** (' >' ' =' ' U4B@3C?FC' % ,'==' , * @ (' P4@7' = 7A'B>C?R' >A7' >'?><' C7? ' %)+' & ')* ' 6 ' '3 ' +' '&3444?' C7?4' F'' FL7C>C43CV' A7' UV77' B&7AV I

' (!" # ' ' 8 : 7(!" # ' ' 7?&'!" # $ +" 8"7('.? 0&'!+' ' (?+ ' : O$"8 8 (!& "(7 !%"#/+ %)+,' 8 & ' *-,' -@ *-' B' L ' L ' * ' 7F6&7' 'FUC<' FU4' >' C7?4' F'' = 3A>B&7?' = '@7A' 7<3C' 4@7' 6>A4?' %) *' ! BZ-.-=' % *' ' = F?4' @FAA3<' C7>?4' F'' BFC<7 = C7<' L3&?' %*' ' 3C' @ / (% ' ' 5 ' 6 ' $' @7A7' Q>?' 'FUC<' 3C' M3?' &7' 4?83<C7 I ' >' C7?4' F'' CF' &7??' 4@>C' ?7L7C' 7&4?' 3?' ' ' ' ' + ' % & ' %) ' % $ 6 ' ' % ' ' ?=>&&' C7?4' F''&FQ' MU?@7?' k) ' 5 ') ' 3 / ' ' KL ' 3)K' >83CV ' FA' >' C7?4' F'' MAF87C' @U = = FB8?' % *+' & ' $ ' % ' 7A'7B4' C7?4?' F''>AVU = 7C4? ?4F&7C' 'AF = '4@7' = 7< 7L>&' ?UBB7??FA?' F'' 4@F?7' ?>= 7' >MM3?

' ' #: 8 .&' $' .:''7,"#/+' ' $'#(*'+! &&!+' 7)"#/' '# '7 +& 9"8"!)!' ' #& (# !%&

OPQ ' 'C*B! ' % $ ' ') ' UA@>=' FU?7' Q>?' M7BF = 7'>' C7?4' F'Q@>A'?'>C<' Q>A7@FU??7 ' K)K ' ' @ ' %'C % %' 'KL ' % *' @7 I ' 7C4?A7<' 4@7' C7?4' F ''&344&7' YU37 4'?4A7?4?' 3 -?' (' '@ '33 ' %)' &344&7' FC<FC' MQ ' MF = '>C<' MA7<' 3C' ?F = 7' @3<7FU?' C7?4' F''>&&7I?-

S' '+&!' +& "&+ $'+' 8"7('.0&'!+' / ' $+: '%(+' (& ' #!('#&,' '# !%&& +(8& &'& !('7& ' (& + 8(,&!%(!' &('% + 8(7!& ' #& "+' &#'7 +&,' '#' $"!+' "#! ' !%(!' *%"'%"+' #&9!' "# +"D& ! ' "!

' * -' *6 ' Q>?' BF = = FC' 3C' 4@7' 3) 4@' B ' >C<' ' * -' ! %G '3C' 4@7' '3A?4' @>&' "F ''4@7' 3 4@ % ,+' ' 6* ' ; UA47?5' '% ' I'C7?4' F '' = I ' VFM&7447?' % + ') ' ,' ' ' S 000 ' B' %+' 47 = ' FA' 7U7A I ' C7?4' F '' BF = 6] 47A?' KL333 ' ?' % ' % ' * -' + * $ ' '3L' M' >= 67A?' 4@7' C7?4' BFC4>3C3CV' 4@A7?7' 33%(' 333% ' %) ' " ' / ' ' J * ' ' 3 ' 77' @>?' VF4' FC' @3?' Q@F&7' C7?4' F'' C3V@4.B>6?' K)?' " ' 8?' ;%)* 5 ' , % @7 I ' >A7' >&&' BFC4>3C7<' Q34@3C' 4@7' BF = 6>?7' F'' >' HU?4' 6AF6FA43FC' ;&387' >' C7?4' F'' MFK7?5' %))' . ' %--6 ! :+' UAC7<' FC7' Q34@3C' >CF4@7A' &387' >' C7?4' F'' AUB3M&7?' FA' "FK7?' %*+' *' ! ' F %5' F'+) 0 ' C7' 7?4' F'' A>Q7A?' %* ' ' ' (" ' 6[F' '6',' 7' @>?' CFQ' VFC7' 6A744 I ' C7>A&I ' 4@AFU@' C3 I ' Q@F&7(' C7?4' F'' ?@7&L7?' % +' ! ' *) * ' ' ,' F7' 6UM&3B' 3?' &387' >' C7?4' F'' 6>47C4' BF''3C?' ' FC7' Q34@3C' >CF4@7A ' % + ') ~' -2 ,'@* * ' ' %),' +5 *' @7A7' >A7' C7?4?' F'' 'FQ7A.6F4?' A>8?7 ' Q>47A.6F4?' ' %) ' % ' ;' % +' ;% * 5 %+ ' 7A7' 3?' >' C7?4' F'' Q>4B@' V&>???7' >A7'4@7' ' ###&'!&,' +& "&+ $' ' /*%&&?+' :7?&)+ . * 'N ' ' &' >R@>H@ % ' ?' ' # "+ 7(!&,' &+"!' $ (' 8"#& (7 ' 8&!(7 ' ': "#/"# !%&' 8",+!' $!%&'$ 8(!" #+ %*,' (' 3C' @ * % ' !'@%/ ' ; 3?4' ' F = = 5 ' , % ,' 7>A' @3 ' @FU?7' @>?'M77C' <3?BFL7A7<' (' BFC?3<7A>M&7' ?3&L7A' = 3C7 FA' >?'4@7 I ' B>&&' 34 >C7?4F ''?3&L7A' *) ' $ ' ' 2B ',5 ' 'K ' 7C7A>&&I ' FUC<' 3C' C7?4?' FA' L73C?' F ''AFB8?' ' @ ' F * ' ' *%@ 7' ?7BFC<>AI' .AFB8?' BFC4>3C' C7?4?' >C<' ?=>&&' L73C?' F ' 3AFC' >C<' BF667A' 6 I A347?' % * ' ' ~ ' 33 % ' 4A>4>' F'47C' <3L7A] ?3'37<' Q34@' L73C?' >C<' C7?4?' F ' BA I ?4>&&3C7' = 3C7A>&?' ' ;@% ' < ' ' * ! '@% * '%*#' @7??' =>???7' >A7'4@7' -BFCB7C4A3B' V&FM7?' FA' -7634@7&3>&' C7?4?' Q@3B@' >A7' ?F' B@>A>BA7A3?43B' F'' 7634@7&3F = >' % +' 4 ' 4 : N ' ' * % '+' * ' '+%' @7' = 3BAF?BF63B' B@>A>B47A?' F ''&U6U?' >A7 '3C'3&4A>43FC'F''4@7' 3C47VU = 7C4' Q34@' ?= >&&' B7&&?' >AA>CV7<' 3C' -7C?4?' [P74B R

4' % 6' (#,' *$6' (+' ' 0!** ,' 0 * ,' 0/ % ' 0/ %) 0/ + $ % ']] $ '0 >' ' 06+ ! ' 0)$ % & ' E *66 '0G & =' ' -06+ ! ' 0) * $ / * ' '0& /B ' '0$ % & ' '0 % & ' (' ' 0! ! ' -' (&+!F' 'B' F' 'B7& 'F$ (8& N+&&O : !+ I ' $ ' #&+!F / : ! 'NLI ' #&+!? + "#/ ' F+ : / ('N+&&O : !+ I

' % / (' % ' 7B ' % 0,' 7>A&I ' >&&' 4@7' ?UC.'3?@7?' >A7' C7?4.MU3&<7A?' ' % +' + ' ; 5' 0,' @3?' 3?' 4@7' @F = 7' F ''4@7' .-C7?4.MU3&<3CV' 4A77' >C4?' % ' % , ' G '% ' 7B ',0 ' &7??FC' 'AF = '4@7' AF (637' FC' 4@7' >A4' F'' C7?4.MU3&<3CV' %)*+' & ' * ' ;7<' +5')*)&' FA' '>)*)&,' FC7' 4@>4' C7L7A' Q>?' 'AF = '@F = 7' >' ! FC<&3CV' FA' >C4FC' > *) %+' 4@7' 7?4&3CV' FA' j 7?4,' BFB8&7'# 4@7' &>?4.@>4B@7<' M3A(' 3C' >' C7>?4' ' * (' % 'B&KKK33 ' @7' >A43'3B3>&7' -C7?4.BF = 6F?3CV' Q>&] &FQ ' M]' 4 ' $ ' ' + ' ?' A7?4&7??' >9' >' -C7?4.<7??A47<' M3A<' % K ' ' ! , $ ' % * ' 34@3C' 4@7' ?6>B7' ''>' ?Q>&&FQ[?' -C7?4.<FFA' %) 4 ?' & ' 3) ,' @ ' '33' !' 3' - 7?4.! A>= 7?' 4F @F&<' 4@7' >?7?' 4@>4' = >' I &I7' MU4' F'' 6A7?7C4' U?M' %'%) ' ' ! ' 3L' ' 7]A7' 3C<77<' ?F7' U&&[C' 4@7' - 7?4. U44' Q77' AI7' '>?43CV' >C<' 'U&&' ' ' 'O ' ' %)*' KKKL333 @7' ?>CC.= >A43C?[b-C7?4.@F&7?' >4R>\ * * ' ' ' %, ' (4U A3CV' '&37?' >= FCV' 4@7' V>I ' 674>&?' 'FA' M&?(7?4.87763CV' 6>A4C7A ' K)KK ' A ' $ & + ' >' C7?4&7A#' >' -C7?4.' = >87A ' %)+, ' ' ' ' ' * $ 'G *+' 'KKL33 ' ;%) 5 ' K+' @7C' 3C' >' ?4>47' F'' &3M7A4I 34' 3?' >C' >< = 3A>M&7' C7?4.' = >87A ' % K*' %% '-% % ' % @7' = >47C>&?' BF = = FC&I 7 = 6&FI7<3C' [@7?4(= >83CV' ,) ' ' % ' *' 'F % ' ;%)+5 KF ' '>LFUA347' 6&>B7' Q7&&' ?U347<' 'FA' CB?4. = >83CV' >V3 ;' ' 'B' % $ % ' /' %)+' &F?7' .U6' M74Q77C' 4@7' -C7?4' 6>A4' >C<' H>Q>' F'' 4@7' M4FB8' K (' ' ' ' ' %' \ * * ' ' +,)*' 7?BA3M3CV' 4@7' -C7?4' 6&U = >V' ?A7=' (' <>A8' ?67B3 = 7C') 6 ' ' UC7' *) 0%' 7' 3?' >' -C7?4 FMM7A' >4' 43 = 7?' >C<' ('37&<.AFMM7A' >&Q>I?' K) ' ' * +$ ' ' UA4&7.<FL7?' A7BF = 67C?7' M ' I ' 4@73A' M7>U4I ' 'FA' FUA' A43' &3CV' BFCB7??3FC' F ''-C7?4.AFF = ' 5 ' ' ' &' U6((') 0%' > ' / ' ' >' (3A>&' ?6A3CV' F'' 7L7A>&' BFCB7C4A3B' BF3&?' ' ' G ' ' ' $ ' ' ' ' '

$ $

4' $7" ' '0(* ' *' ' 88 #7)'&9 &++&,' .)' *G '* '+' !
)3 '3(! 3B' =' A. U&B87A' % *' %6 + ' 'C3 .' 7A>' 667')' ' ,*)' 3M3<' ,)+' 7F(7A>'Q7&FA')' ' ' % % '%') ' 7 ' V>C' @3?' FU7A7' B@7F87' *+ ' @3A7' @7U7<' <F' G' @3?' CI5Z7A7' B@7F87' MIC75$7' >4' @3A7'83F1$?') 2 ' ' ,+) ' 3?' C 7 (A' B@>U7&' @7'?= F4'<FUC ')*96' ' ; F&&?5 ' %*' >C4>&U?' ?4FC<75$' >&Q>I' 3C' >' Q>47A' L6'>CFC' 4F'R$7 FU7A' MA7A<7' F '' $7' C75$7A' &3667 ')7-9' @ #' ' % '+ ' K3#' U?B&?2 ' = FU7' 4@7' C7&@7A' &>Q7 ' +Y' ' < ' J ' ! ' VV ' 37B7?' F '' VF&< 'M>CV3CV' U6FC' 4@73A' C74@7A' &36?' %) *' "-" *$ $ ' ,*6' L ' ' @F'B>C' V3L7' >'C>4UA>&&' A7>?FC' F '' 4@7' ?4A7CV4@' F ''4@7' C7>4@7A.B@>6'* 0 # ' % ' C% ' 333' L ' C' UC7>?I' VC>Q3CV' F '' 4@7' C74@7A'&36 ' % *.)%@ & : ' 5 ';% 5 ' L333' +) ' 'C74@7A'#>Q' 6AF4AU<3CV' ?F' @3<7FU?&I'4@>4' = ?' 4774@'BFU&<' C7L7A' = 774 . ' $'!%&$&/+' '!%&" '7 !%'#/' 7+ '"#' ' $%#'N' 88 #"# &'&#!' :+&!' '/ * ' % ,,' : J&,B' * ' *' *+ '%K *' 7?4'@7 = >87@I = ' &>=7' F'' @3?' C7<7A' &3= = 7?' 36 6' 4 '@' '%%' * +' &&' = I' C74@7A' ?@>67' 4@U?' VA7Q' A>C?'FA= [<' % ' ' S FI(FAA(' * ' 'KL3' 3?'C74@7A'67A?FC'Q>?A7C<7A7<' BFC?63BUFU?' MI' >' 6>3A' F'' <&CV(' ?=>&&B&F4@7?' %)' 4 # ' ,%/& 3' FCV' M7'FA7' 4@7' F&<' 6FA47A' BFU&<' 6U&&' M3?' &7V?' 4@AFUV@' @3?' C74@7A' V>A=7C4? (' % +)' 4 ' < ' ' % ' ,5' K ' 7' 'FUC<>'?43&&'3<&7A '7&&FQ Q>A=] 3CV' M3?' C74@7A.=>C' FC' 4@7' @7>A4@.AUV A' %6 * ' "# / ' *& '7" 8.+' ' (!+' % ^0B' % ,+' 4 */& ' %* ' 34@' >' B&F>8' <U&I' 4UB8[<'AFUC<'4@73A' C74@7A? ' # /&## (7 :+&' $'!%'#/+' *' #7)' % , ' ' * ' (/ &(=&' T ' ,N+&&Q: .!' % 5' % 35 ' ') ' ' ' ' ' & #& & &Z+! #&\ .&#'/', +!"$7&j M34FBC7<' '7A&>B #' (' LU7A7' ?4FC' M&4FBC(' @F67' ' ! * ' ; F&&?5 ' % ' 67' 6&>C747?' >C<' 67' C7 I (A' QB 8FC?' = F7U7@' FU4' F '' @F' Q7?4' = '4F' 7?4' % *) ' 3% ' ! '+ ' I = 7?' # '+FUA' C74@3AV4FU7' G' C>87C?' UA7' &7VV3?' * ' % $ 6 , ' ' 5')' A347' 67' '3A?4' 3VUA7' F '' 67' @ I 7A' CF = M43A' 7U7@7' LC<3A'4@7' '3A?4' '3VUA7' F '' $7' C74@7A' CF = MUA' ,-6 ;=97' 4 #' + ' 'K3L' , +' IA' A3?4A>=' M7M&7<' MF4@' 4@7' FU7A' ?@747' >C<' 4@7' C74@7A') 7. *' 8 N& ' + 'h' ' @7' MF<I7' F ''4@7' Q>I C7 '4@7'C74@7A'A>4@7?D'4@7'FU7A'A>4@7?' M ' 4 '$ ' % * ' * ' =' +' 7>4@7A' L7A45' 3?' 4@>4' Q@3B@' 4@7' >Q37A?' <F' B>&&' FU4@' " F (' >C<' 4@>4' 3?' 6AF67&&I' >&&' =>CC7A' F '' LC<7A.' QFF<5' >C<' >&&' "U?@7 5' @FAC7?(' FA?7' >C<' 4@7' &387' K)? ' # ' % '%>+' @7' ?83A4?' '&FQ' &FF?7?&I' 'A3CV7<' M7&FQ#' 4@7' U6?$&' (' ?@FA47A'4@7C'4@7' C7>4@7A' %))>*' 4 '@ ' C' +)' [Q3K4' U667A' C74@7A' >C<' ?UAAFUC<3CV' !3A7?' (%'8*K9' ' V@)'*' ' % ' @AF[4@73A' A>C8?3C'?3&L7A' 6A3<7' @7'C74@7A'BA7?B7C4' ?77=?' 4F' V&3<7')97;' 5 #' ' *)& ' KKKL333' @7' C74@7A' '3A7?' F '' <FUM4' V&>A3CV' 4@AFUV@' + >>' $ ')- '33', ' &&' = I'C74@7A-' ?63A34' ?F'4F' ?67>8' Q>?' <U&&7<' >C<'H><7< ' $ * ' N ' * ' 4' *' #7)' "# $"/' ' (7!:+'=&' :+& %) ' ': 7C7L 5'-* 6'K&3 '%+' 3?' @7>A4' 3?' >?' ?4AFCV' >?' >' ?4FC7 ' >C<' >?' @>3<' >?' 4@7' C74@7A'C'3B4FC7 ' % +*' ' / # ')' F * ' ' ' '%' KKK3K ' D # ' @7' 7'7C<>C4 ?' A=?' ;Q@3B@' 7A7' >BBFUC4?<' >?' '3K7' (7A.=3&?4FC7 ' FA' ?4F<8' F '' =>3C47C>CB75' %*) (,' ' ' ' **' * -' <+% B' ;% 5 $$$' ' @7' C74@7A' =3&&?4FC7' F '' = I' @7>A4' M7V>C' 4F' <???F&L7' %) ' $ ' ' C & ' +M ' 7' ?@>&&' =>87' 4@7' ?QFA<' F' =>4B@' 4@>4' 637B7' F '' C74@7A?4FC7' M3?' @7>A4' % **' :' F ''@% 'KKL3&3' $ M7&37L7' IFU' @>L7' >' @7>A4' >?' M>A<' >?' 4@7' C74@7A' =3&&?4FC7 $ ' ') &,' :#,&'$E'7& B' ' % @ ' ' * + ') * ' $')K+' >3?47A' Q(8&+' >8V 3'F '' >C87&FUA' 74@3A' &7A8' 7V3?47A &# !"#/' !%&(=&## ' !%&# : &' &/" ##+' N +: (7!) *'!%& 4 3T *' " ' '< ' 'L33 '* ' @3?' <>A8?F=' C7>4@7A' QFA&<' @7A' &3V@4' F4@' <3= ' %) ' % '3L' U ' * ' @39' ?@7Q7?' IFU' >A7' >MFU7' FU' &U?43B7?' 4@>4' 4@7??7' FUA' C7>4@7A' BA3=7?' F' ?677<3&I' B>C' L7CV7' %*) ' 8 $: ' 4A' -%) * ' ' !'333 ' @7' ?>M4&7' 3V@4' @><' ?6A7><' >AFUC<' @3?' C74@7A' FA&<' >' &FF=' 6AF'FUC<' %*+' ' ! ' + / ' 3C' 33' F' >?63A7' ' 7IFC<' 4@3?' C74@7A'?6@7A7' % ' # ') ';% *5 @U?'<F' 7C' >C<' @776 6&>I' 4@73A' 6>A4?' 3C' 4@3?' 74@7A' >A4@')97 6 & : ' 5 '$'K3') +' @7'3C47&&7B4'F '' =>C' 3C'4@3?' C74@7A'QFA&< 6 ' &# !"#/' *%(!'7"&+' ' "+' "8(/"#&,' (+7")"#/' .&##&(!%!%&& (!%' &+ ' 'G* !' *' =) ' / @ % ' KKKL33 '*' 744UC' =7B' 3C' ?7> 7' C3F 7A4>C'3C' F?4AU=' ' *%'C)&/' * ' ' '6U' (7C7A7<7?4' =3C7'?>U&7' F ''6 (A7'C7F@7A>C'@7&&7<' 4' 7?3<7?' 4@3?' C74@7A] QFA&<' B@>A>B47A' . 0-* $!'><H' 6 (% % ' #" B' %),' ?4 ' $ $ ' 'C 'K ',+ ' 4' 3?' Q@7A7' 4@7' F&<' @>A<' C 4@7A.'FA=7<' AFB8?' 'AFL=3CV&I[>667>A'>MFL7' 4@7' Q>47A 7& "'"7"& ' ((&' 7 ' 8+¥' "' #" 77 ' #! ' () ' (& !$ ' F& ' "' (&7 & ' Z ' ' 8? ((!"=&' $ 8' .(+&,' # !%&' +!&8' ' /F¥' +&& #&9! \' * & ' 7 * & ' ' * # C ' 'MA' '(+! .& #&,!"' ((&+! #' ' %*&##,+7&.' '444' E & ' C** ' 999" b R " ; & & '+ #' $" ; ##&A#' -' /&+'&($!' :I # (8 ' &')' 9 ' M ' ' % ' ' ' ' ' ' &/(&+ ' & &!' 8 ' ,?I' #& ' &' ##& i6 %' ' ' ' /$' % ' & .&6#& &' (###& %&& *(+ ! 2&?!7"& ' 8$ 4 *6 ' 8+¥' >F5' (700& ' (" & ' '" #)0]& ' ()7 & ' N5 ((& I' @F5' (& ! & ' N5 (& : ! & I' @F5 (&2 & ' N5 #&, , & I' R (&!%& ' Z - ' ^' "+ ' 0' ' ! 0' ' ! %' ' N : ' (#, ' X=3 ' ! 4' ' ! ' ' ! ! ' ' ! %' ' ' ! ' N ' ' ! 4' ' 0'Q' N * ' ' ! ' * ' ' ' ! 0' (' ' ! ' ') ' 4' & ' (# &#! ' >' /% BA" 3' % %$ ' $' 0' , *#' *"!0% ' 8 ((!"=&' +:$$"9\' *#' , *#*(, + C * * -'=' =A' I A?7C?4A7>=' UC<7A'C>???>'H7C36U' C367A' K7Q347<' 2¥ 'S ' =& + -'C * 'K&3 ' :') 6c4' 4>BC> ' 6>B4' @7' ?B7>&' =>' 67CB>C' U6' 6FCC7' CI 7A' *%' C) & ' * ' ' KFK' 6 7 4' ' 72¥B' >'U&><' G' QIA=U=' >Q7>&&76' G' C767A' >'&FQ76' %' ,22' ' * ' ' ; >U<' 5'>C' % K,' 3FC' @3C7' 6>' >C' @7FA>' 674' @7' = 3<' 6>=' <IC47' C3(7A'>??>@') 'K>FFF' ' ' * ' * ' '3KK' 7' '7A<7' 'AF' 67' '><7A' 'FA' 6>4' @7' BF=' C7(7A' 4F' @7&&7' ' F ' B' 3 8*' 3 'U&' C7<<A7' &F<' >C&3 7A' ?>&' U&3<7C' FC' @3?7' MA7?4' C7(7A')'%+ '4A' ' $ % * ' ' %%' K33' *' UAC7' 4M3??&'>MFU7' P4UAC7' 63??&'"C74@7AR *$6 ') ') 3 " ' + ' ' C ' ; B@AF7A5' ,' 3 V 7A' U6?43E7C<7' 7CV&>?' C367A?43?7C<7' 6 ! ' 7' U6?43(7' >C<' ?7' C367A?43?7' ')'□ ' %3') ! ' ,+)' ' (7'I&&>' 4Q>' 43<>' = 4<' M I A>' U6V>CV7' F(' CI673V>CV7' ' ' ' * ' ' KKK' "A7?4' @7' ?47V' C7F 7A W' F'' C7F 7A?437CV7'?67B' <'>U<' FC' 67' ?>&=' MFB .!7 6E!%& ' %! B' 6 ' # '" #" & &' #" &' 5' :& " & &' (7+ '"# ' 8 .' >F5' #"' & F' 5 #) & F' #& & F' Z$' &' ' [' : ' ! 2 4 ' ' ! %* ' N ' ' ! 4' ' J N * ' ! B' * ' =' ((B ' ! (Y ' ! 4(= *#'7 *', *# B ' S' 4 + -' C* ' KKK3K ' :' % ' 6 7 4' &7F@47' ' I A ' U6' (Q 34 ' G' ?3F' M7'3(7' 7=A'37?34' 6>7A' C3 7A7 ' %' (' # $ & %' ' %+)' >(' =3C' '3>7?B@F=>' 3C' 'F&<>C' M3VA>'7C ' C36A7' K7@I<7<' ' %' ' 0 #' % ' 6>' CV&3?B7' FC(ABF=7C' 67' "AU4UC?' G' MAFU@47C' @7F=' 67A' C7F(7A7' . # *$6^9 '%')' □ ' @ ' ; @FA675' BKKKL333 ' % ' 67@' =3C' &3B@>=>' FC' C3 7A.<7&U=' 7FA >C' QUC3(7')□ ' ' ' * ' * ' K(' 37' 4UAC7<' 'A>=' 67' <F=7' 4F' @7&&7' 4F' 67' C3 7A' QU-' C37CV7')' %, ' ' C % ' ! % ' ' ,*' 3C' ' ' ' ' , +' F'3?' B@3C' 43&<7' 67' C7F67A' = ' C367AR' 7C<7 "." &!%& ' ' ' ' ' ! * ' N ' ' ! 0' 4' * ' ! K%' (' ' K!4 'N * ' (#, ' (' ! 4 H' *&-' :#,& 8 +!' 7+ ' %6 * % ' % + ' " ' @ % ' BKKKL333 ' %+' I'?UM?4>UCB7' 3C' C7557A7A7' F ''7A4@')' ** ' :' / ' AF'-' + (3A7BB3FUC' Q@3B@' &FFV34@' FFC@' 4F' 4@7' FU7A7A' >C7C43?' @3?' C74@7A7A' >C<' CF4' 4F' 4@7' C74@7A7A' >C7C43?' M3?' FU7A7A' ! ' &2!7"& &+!'' ' Z '+': & 7(!"=&$ 8&,' # 9 ' % ' '$' "+' ' & ' ' ! B' : ' ! -' ' ' ! ! *' N ' ' ! 0' 4' * ' ! K%' (' ' K!4 'N * ' (#, ' (' ! 4 H' *&-' :#,& 8 +!' 7+ ' %6 * % ' O

>A3

>@@

. ' B' 5B ' ' 3 ' G%, ' !%& +% !&+! ' 8 +! ' #? =&#"&#" ' ," &'! * ( )' 6 ' & '&" ' 3 'G%, ' (,= > '% ' + '+ *" 7' ;&FU47 5*7 C78?47' Q?37' 4F' A3<7 ')'%) & ' % ' 7 -' % G (' * ' @3?' = ???>V7A C4F' 4@7' B>?47& @>&4' 4@7' C7K47' Q>! ' %' □ = ' : ' ' ! ' *+ ';%) 5) ' @7 ! IF<7' FL7#'>' = >37 I ?' 'FA' 4@7' C7K4'Q>I 7 'MU4' 4@73' '7&87 3C' 4@7' = IA7 ' % ' 0 ' ' ' * W ' KL ' , 9 $ Q I&& A74FU = 7' 3C4F' CV&>C<7' 4@7' C7K47' Q>I 7 ' K (' < $ #' %) + B' ' ' ' 3K ' ;K), ?5 % %@7' &7V3FC?' Q7A7' CF4' MAFUV@4' 4@7' C7K4' Q>I 'MU4' Q7C4' FU7A' >' '>AA7' F"' ' %)* ' & # ' @ ' ;%),5 % ' @>4' BBKC7?' <FQC' 'AF= ' FUA' FUC4AI' 4@7' C7K4' Q>I' 3C4F' 4@7' Q>I ' %*)*' ' * -C * * ! ' % ' @7' C7K4' Q>I' 'AF=' 4@>4' 6&>B7' 4F' A ' >AA3?FC ?' @FU?7 %* ' 9 _ : <' ' ' . # ' '@ % * ' +'' % % ' B C +9 $ # ' ' ' ' ' $' + ' $ ' ' - + ' ' ' ' % ' ' ' % ' ' ' 6 ' + ' $ ' ' ') * ' ' ' ; AM 5' >' @U?' MA7<' # ' 4F' &7>AC7' 4@7' C7K4' >C<' A7><37' Q>I ' 4F' ?3CC7 ' > +' : ' J ' . ' 333 ' > 9 $?67>87' 4@7' 4AU4@' 4@7' C7K4' Q>37 ') / * ' 4 ' U ' 8 ' % % ' *G ,'# ' F' &7 4' IFU' 8 ' 7A7' 4@7' C7K4' Q>I 4 ' $ ' & + #+'" ="#/' ' , * &7?"#/' #&(&+! ' ! #& ' %(&#"#/ ! ' . & #&(&+! (! ((!"' :7(' !" 8& * ' % ' ' 6 %' ' % ' ' % ' ' ' 3 ' ' ' ' '

! ' !' (. 7& ' ! ' &#, : & 8 : '% -!&#, & ' , &7"' (!& %)? (' C+ G% &B')& ' ')' 2K(7' M7' 4@7' Q 7 (7 ' '7M&7 ' C3?7' ?4F = >B87? F'' =>C I ' (%)+ ' % & %$ (' *+ 8B' % ! '3&& ' K ' ;%)) 5 ' @7' "77' ' 47C<7A'>C<' C3B7 ' >C<' FC&I' &3L7? 3C' Q>A = ' Q7>4@7A ' %'%)*+' ' '3C' - ' ;% +,5 ,*0, ' 7 'Q>?' F ''?F'C3B7'>C<' 47C<7A'>' BF = 6F?343FC ' 4@>4' >' 44&7' A>3C' FA' Q3C<' QFU&<' <3?FA<7A' @3 = ')'9) " ' ' ' J ' % ,;% 5',)" U4'4@7?7' >A7' C3B7' 6&>C4?' >C<' >A7' 876 4' = F?4&I' UC<7A' &>??? ' I 7' >3A7' M73CV' 4FF' AFUV@' 'FA' 4@7 = ' $', ' =& F &$"#&, ' 7 : 9 : " : +' 6 9!&9' ' '% ' ' 3 ' 3 ' 3L ' 33 ' ;%) %5' %+(' 7 ?6F3 7' FUA' B@3&<A7C?' = >C7A? ' M I ' FUA' FL7A = UB@' BFB87A3CV' >C<' C3B7' 7<UB>A3FC ' 9 - ' ' * (' * $ ' / ' '9"" ' @@>' &&' 4@7' F = >C' FU4@' 4@>4' @><' VAFQC' 7''7 = 3C>47' Q 3 4@' C3B7' 3L3CV ' HF3C7<' >C<' '>LFUA7<' >43&3C7 > ') '+%) 'N($$&' !&, 7) I' 8 ,&+!' &+& =&, ' 6 W %+ ' ' 'C + ' ; 5 % ' >I<7C?' >4' @7A' '3A?4' 7<<ICV' 73' CI?7' >&' / ''3A?4' CIH4 ' K?- ' (' ? &' % ' @>I' ?YU7&3&' &1 87' FCI ' V>3&3 ' K $' N ' * ' (' @ ' 3 ' &3 ' @7C' M7' CF4' C3B7 ' 7A?7<>' >?' QF = 7C' QFFC4' F' @>?4I' &FU7A? (' %) +' ' * ' +' >5A' A7 ' @7' C3B7' F = ' FC' 4@-' C<3>C' ?4776' ! AF = ' @7A' B>M3C <' &FF6' MF&' 6776 $. ' %) ' &7 : ' ! (#!' : # * "77" # / ' #+!' * ' ' ' * -' * "!9&' "#$ ' 6)'%) ' ! ' @* $ ' ; ' ' 5' 3L ' % @7' CIB7?4' 4F' A7??>L7' 6FUC' 4@7' CIC3?' Q3&&' C36' 34 ' %) ' '3C' ! >AA ' @ ' ;% + 5 ' ' 4A>3V@4' M7C4' 4F' V&FA3FU?' <77<?' MI ' 83C< ' C<' 4F' CF' MA>U7' >B@73U7 = 7C4?(' C3B7 ' >69V ' ' ' :A+ ' 'FUC<' 4@7' 4>&3>C?' CF4@3CV' C3B7' 4F' ?@7Q' 4@73A' ?4AFCV' 'FA4?' 4F' = 7' >C<' 4F' F4@7A' ?4A>CV7A?')' 966#' + $ ' * ')&* ' ' @7' 3?' 4@7 C3B7?4' BA7>4UA7' 3C' 4@7' QFA&<' F'' ?U''7A3CV' @7A' 67A' 7B43FC?' 4F' M7' 8CFQC ' ;77<' * ** ' * &* 8?' ;%*% 5 RR' @7 I ' >A7' 7K4A7 = 7' = F<7?4>C<' M>?@' U&' L7AI'?@I '>C<' C3B7' F ''M73CV' 4FUB@<' %)*#' ' + ' B ' U '3 ' 3A4U7' 3?' C3B7' 4F' 4>87' Q@>4[?' CF&' @7A' FQC h'6 ' % ' *' $ %& ' N" I' ') ' ! ' ,"+ 7()' &+& =&' ' &7 : '!(#'&' ! ' 8 (B&' (' + ' : 7& ' 6 W ' ') , +9 $ = >87'34' BF I 7 ' FA' C (7 '>?' >' <>UCV7AFU?7' 67A?FC' <F4@' 8 '-% % ' B' %) ' 2 ' ' ' + ' ,#' >>M' >C<' U4@' >A' B@4' >< 73? 4@FB@4' (7' 34' = >$8' ?>' C3B7 ' ! # ' : * ' 'C3 ' 3L ' % ' C<' @7' 4@>4' ?4>C<?' L6FC' >' ?&36&[AI' 6&>B7 ' >87?' C3B7' F ''CF' L3&<7' @F&<' 4F' ?4>I' @3 = ' L6 ' K) M7' ' ?& (C + % ';% 5' K)' @FV@' 4@7 I ' ??7 = 7' 4F' = >87' CIB7' 3C' 6A>I3CV' 'FA' <7><' %) *' 2 ' ' ' KKK3 ;%) ,5 $' , ' @A3?4 BF = 74@' 3C Q 34@FU4' B7AB ' = FC37? ' FA' = >83CV' 34' C3B7 ' 4F' = >87' >' 6FF A>C?F = 7<' FC7' 3?' FQC ' %)*#' 3 !3 ' $ * ' * ';%) *5 E) ' @7I' = >87' CF4' C3B7' 4F' 47&&' @3 = ' 4@>4' 4@7A7' 3?' CF' 6F???3M3&34 I ' F'' ?>&L>43FC' MU4' 3C' 4@73A' Q>I ' (+!"," : +', ("#!) ' ,"$"' : 7!' ! ' 7&(+&' &+ ' "#' &+ &' !' $'5 ' ' '7&(#"' : &++' (7+ ' "#' / ' ,' +&##&' &$"#&, ' % (="#/' &$"#&, ' !(+!&+ 2 " '4A ' * (' V * /' %%' N>43RI' >; 3' CF4@7A7' I ?' F'' ?F' CIB7' >C<' ?FF' <7&I B>4?' >' = ICC<7' 4@>4' @7' ??4474@7' CF4@.' ICV7' MI ' 14 ' * ' ' '!>4V4I' >3>' @7' ?&FU7C' >C<' 4@7' B>A7&???' = >C ' 4@7' AF = 3?@' CF4@3CV' C3B7 ' %) ' ## ' * 0' + ' %+ ' AF& ' FUA' C3B7' ?FU&??' B&FI<' Q34@' <3&3B3FU?' ?FUC<?' 3&&' &F>4@' @7A' &FQ&I' CF4?7 ' %' O ' / ' (' ' $ ' & *' N>66A ' 5 3B7' ?>A?' >A7' >&&' 'FA' L>A374 I ' F'' FB4A3C7?' '>?' 6>&>47?' F'' = 7>4?' %*)' 1 ' **!' J * ! ' 'N>VA4I' 33' 7' 3?' CF4' ?F' C3B7' >?' @3?' U67A3FA?' Q@F = ' CF4@3CV' Q3&&' VF' <FQC' Q34@' UC<7A' &3V@4' >C4E' FA' U = ' * K / ' % $ 6 ' F ' +-' ' @7' = 3C< 'M7BF = 7? 'C3B7' >C<' '>?43<3] FU?' >C<' &3B7' >' L343>I7<' 6>&>47 ' % ' ' ' ' # '@ %)V' ') ' % +* 4' 3?' M7447A ' >?' '>447C3CV' >C3 = &?' >A7' L7AI' C3B7 ' 4F' &7 4' 4@7 = ' @>L7' A>4@7A' 4FF' 44&7' 4@>C' 4FF' = UB@' K (' ! *'3C' $ ' N 45V I $$' RA5 ' $ B>C' 7>4' >CI4@3CV ' >C<' >= ' CF4' L7AI' C3B7' >MFU4' 4@7' B&7>C&3C???' %)' + * ' * ! & 'N 4V3I' '594' 734@7A7' 34' >4' >&&' C3B7' >?' 4F' Q@>4' 34' B&U4B@7?' 3C' 34?' C7B7??34 I ' 'FA' ?U66FA4 @ % ' K 9 ' 1 ' V' N>R4A I ' , ' (' 8C7Q7' >' A37?4' >?' C3B7' >?' >' FCC7?' 7CC7 ' % %' 2 ' % G ' N>4 ; 6I' 53 FA7' C3B7' 4@>C' Q3?7 ' %) ' V *B ' ! ' & ' '33 ' ;%*%,5 ' U66F7?7 ' 4@7' F4@7A = ' FA7' C3B7' 4@>C' Q3?7' ?@FU&<' A (&I ' >I ' 34' = >I ' 6F???M&I ' M7' F4@7AQ3?7 ' * ' ' * ' $ + ' * 6 % %') ' , ' F = 7' 67F6&7' >A7' = FA7' C3B7' 4@>C' Q3?7' ?' . ' (!"' : 7(' &'"+&' +! "'! ' ' (&$:7' "#' &/ (,' ! ' + 8&' + &'"(7!%"#/ K?(' ' ')* ' J) '3K ' ' ;%)5 % ?' F = 7' >A7' ?F' C3?7 ' 4@>4' 4@7I ' BFC<7 = C7' V7C7A>&' 7' >&&' ?F4A?' F''<4U3C>.' 43FC?' %) , ' ' F % ' ' ? ' ! ' ; AM 5 ' ;V3' @7' 6>A4>C?' Q7A7' >' C3B7' 7F6&7' 3C' F3C4' F'' >4U A>&3E>43FC ' 9 9' ' * ' 8?' ; AF?6 45' 'R3' @7' >A&3 > = 7C4' 3?' >&Q>I7?' L7AI' C3B7' >C<' BUA3FU?' FC' 4@3?' 6F3C4' % + F FQ' * ' ;% + 5' '%+%9 $ '3C<' 4@7 = ' L7AI' C3B7' 4@>4' CF' F4@7A M7' >< = 344(' 4F' 4@3?' BFAA(6YC<7CB7 ' % (' H ' AV 7' 3?' 7K4A7 = 7&I ' C3B7' 3C' ?7&7B4CV' @3?' = >&4' >C<' @F6?' 94 D' @ ' (' C ' * ' ' , + ' 3W 387' 4@7' F&<' F = >C?' C7L7A' L7AI' C3B7' 3C' Q73V@3CV' @FQ' &>AV7' >' 6AF6FA4 3FC' F ''4@7' 67F6&7' 3C' &U7CB7<' 4@7' VFL7AC = 7C4' $' ' (+!"," : +' ": ' 8 (!!& +' $' &' 7"!&' ( )' !(+!&' 6 % , 1 ' C ' $ 6' !A7 = FC3&' ' ' M>< ! A>4@7A' 4Q7C4I' C3B7' A343B8?' ?@FU&<' B7C?UA7' = 77 ') ' %)) ' ' + E ' $ ' * ' +) ' * ' ; % +) 5 ' 32' HU<V7 = 7C4' Q>?' ?F' C3B7 ' 4@>4' M7' BFU&<' C7L7A' A>=7' >CI ' ?677B@' M7' FA7@>C<' 4F' 6&7>?7' @3 = ?7&' ' '

,5

G , 9D

;% 5' ' 7'Q>?'?F'BA7?4'3C'4@7'C888 7'F''4@3?'<747A=3C>43FC'4@>4' @3?' @3?4FC7 'Q>C<A7<' 4@AFUV@' ?UC<A37' @>C<?' > *' 6 % * ' F '%,' $ ' @>4[?' 4@>4' 4F' 4@7' " FF8' @7A7' M7'FA7'U?'Z 6 ' C&I'4@7'L7A1' 3B8'F''4@7' >?7

h' ' %&' &9('!' (8 :#!' - + 8 &!%"#/ ' 6 (BB'

?) 3F'" ' F ') '3L'$ 8C7Q '4@7' FB4FA'QFU&<' CF4' &7>U7' 3&[' M7'M><' 'FUC<'4@7'L7A1' C3Z ('F''@7A' 'FA4UC7

' ' 2, ,4' ')&' *-' $ ' N ' */!* + ' ,4'

++'V' (' (' #' % ' *"!%' ' ' '%

?)3>' ' " ' *+ ' '+ ' P 7R'B>=7'3C'4@7'C3B87'

F'' F66FA4UC34[' 4F' M7V' VA>B7 ' %)+ ' D B' *-) ' % '

) * '% ' P 7R' B>=7' 3C' = 7' C3B8' F'' 43 = 7' 4F' A7&37L7' 4@7' Q7&&$

>''7B47<' 3C' A7?4FC ' ' 0 '4A ' *-' % '

,, ' %* ' ''@7' @><' CF4' VFC7' <FQC' >4'4@7'L7A1'C3B8' F''43 = 7 '4@7'

@36' BF6&<' CF4' @>L7' '>3&7<' M73CV' L7A1' YU3B8&I' M&FQC' U6'

,6);' ' J '3 ')7?9+' ' 3 ' C'4@7'L7A1' 3B8F' 3 = 7

3C' 4@7' A343B>&' F = 7C4' ' ' : ' ' C 6 ' ;%*+ %

' (' C43FB@U?' A74UAC3CV' >4' 4@7' L7A1' C3B8' F'' 43 = 7 ' Q>?'

UC>C3 = FU?&I' <7B[>A7<' S3CV' E 3 ' N ' C ' @*' '

L333' B C 2 ' 7' UC7K67B47<&I' >667>A?' HU?4' 3C' 4@7' C3B8' F''

43 = 7 ' >'47A' I7>A?' F''>M?7CB7 ' * ' : ' C% ' ' C+ ! '

KK ' 7 M>< ' B@>CV7<' ?3<7?' >4' 4@7' L7A1' C3B8' F'' 43 = 7 '

% ' & ' ' %,' F!' ' '' L33' C ' @7' 'F&&FQ3CV'

CF47 'A7>B@7<' 4@7' IFUCV' =>C[?' @>C<?' 3C' 4@7' L7A1' C3B8' F''

43 = 7

. ' 6 ' !%& ' ' #+! : '!" #+E

>**' %')% ' %) ' '- ! ' ; @74@>=' FB 5' %*#'

F = 74@3CV' = U?4' M7' <FC7 ' >C<' CFQ' Q>?' 4@7' C3B87' >C<' #F I C4'

F''43 = 7 ' K) E 8 ' ' F %) ' + ' 2 >' @7' Q3?<F=' F''

F< @34?' 4@7' L7A1' C3B8' F'' 43 = 7' 'FA' @3?' >66&3B>43FC ' % + '

4 ' 3C' *') *' -' ' 2 ' F' 4UAC' 4F' 6AF'34>M&7' >BBFUC4'

-4@7' C3B8' F''43 = 7' %)*' " ' & * ' ' C% ' 'KKKL'

2 ' 4' Q>?' ?3 = 6&I' 4@7' = B8' F''43 = 7' Q@3B@' V>L7' 34'4F'@3 =

>A ' N '"!%' %' (#, 'HH I'[' '' "!"' (7 "#!' ' 8 8&#!'

*' %

> ' 8 ' * ' 'L333' % ' @7A7' >A7' ?F = 7' C3B8?' 3C'

3 = 7 ' Q@3B@' Q@F?F7U7A' C<7?' = >I' 6AF = 3??' 4F' @3 = ??&'7'

?UBB???' +> '' & ' ! ' %%' 333 ' >2Z 34@' I = MF&?'

3VC?' >C<' A3B8?(' CVA>L[<' 3C' &>C74>AI' 3B8?' ' +8 '

' $ ' , @7 I' @><' BF = 7' 'FA4@' >4' ?UB@' >' 'FA'

?>&7 ' %' +@ ' ' * '%%' KK ' 34@' Q@F = ' >4' 4@>4' &!

4&$>C3B44&>A' C3B8 ' @7A7'3??UB@' >C'UC&UB8I' BAFQ'4F' 63B8 ' % * '

% ' ' ' %)' 7A4>3C&I' @7A7' Q>?' >' = >C' 3C'

>C' 3C47A7?43CV' C3B8' F'' &3'7

$. ' B] ') &' *-' $ ' %"&7 ' *"!%' ' (H

) % ' * ' !B' *$ $ ' *' F ' ' $ 6 , ') * '

%,' C' 4@3?' C3B8' F''<= 7 ' C ,'F*!'Z [3?>

BA3 = 7' F' 3C47AAU64'>4'?UB@'>'C3B8'F''43 = 7 ' %'%* *' ' :

+ *6 * 'B C $&FF8'U6FC'34'>?'>'?3CVU&>A'6AFL3<7CB7'

F'' F<'4@>4' A' >AA3' '?@FU&<' BF = 7' 3C' >4' 4@>4' C3B8' F''

43 = 7 '%*%+' 'YX'' ' A7'' ' @7A7'3?' C7

??>?FC'>C<' C3B8'F''43 = 7 'Q@7A73C' 4@7I' Q3&[>&&FQ';74B 5

!' ' ' "#!' +!(/&' ,&/ &&' *' %') &B' ! ' ('

#"'&!)' 6

/*/ & % ' ;%),5 ' KK' % ' @7A7' 3?'>'C3B8'

3C' % "+!"(#"!)' 4F' 4@7' Q@3B@' Q@F?F7L7A' BF = 74@ 4@7I' ???

''77&=FA7'4@>C'F4@7A?'B>C<>')/-+' & $ '@% *$,*'

' 3' ' F' '34' 34?' 6UA6F?7' 3C' ?UB@' >C' 3C4A3B>47' C3B8' F''

3AA7?F&U43FC ' %'K) F & ' $ ';%* 5 % ' !FA' Q@F'

BFU&<' B@FF?7' MU4' 7AA ' Q34@FU4' ?F = 7' A3B8' F' 4>87' IFUA'

&7L>43FC' 4F'>' 3B8

! , ' '%(#'&' !:#"!)' 6 P % b

1 ' *$ $ ' + ' '3(7' 3?' ?F ?7C?3M&7' F''-?

<>CV7A' 7' B>4B@7?'>4'>C'I'4@3CV O4@3?' 3?' FUA' C3B8

' ' N &'"+&'+&##+&' # !' '7&(I' 6 ' % ..B'

K) (' "/ F ' ' J * ' '3L' 3I ' L7A1' @>A87 ' M7' ?74'

= 7' 3-4@7' C3B87'4[FA@7A' C3V@4'>4' 6A3 = 7AF

' NI ' ('$ (: , :7&#!' . !! 8' "#' (' .&& F'(#'

,"8 "#"+%"#/!%&' O : (#!"!)' $'7"O : ' ' #!("#&,' "#" "!'

N $'5 : ' I' #7)"#' % ' ')&'%'!-* ' 6

C' YUF4 ' 2%K* ' >??FB3>47<' Q34@' ?7C?7' ,'>' MU4' BF = 6>A7'

YUF4 ' E)K<' UC<7A' 2 # ' B' %

' K)FF.K>' $ ' *+ ' ?' % '; 7AB I' FB 5' + ' 34@'

2DCC7?'F''M77A7' C<' 4@F?7'4@7I'? ('>A7''3&('Q34@'C3B8'>C<'

'AF4@' ' ' # '; >47A' 5' % G / ')' 8?'

' * 0,' @7I' L7?<' ?F' = UB@' <7B734' Q34@' C3B8' >C<' 'AF4@'

%'%) ' ' ' ' ' % ' ,' +' ! AF = '4@7' 3B8'>C<'

! AF4@' F''>' 7CCI' F4.@FU?7' 6 %' * ')'%)) ')&' -

* &' 3C' *36 ' C % ' '+ *' FQ' Q7 &' &>I ' IFU' >&&' F67Y'

4F' L37Q ' 4[?' >&&' 'FA' IFUA' ! AF4@' >C<' IFUA' 3B8' ; IFU' ?&>L7?5'

%' %* " " ' % ' G8')&' % ' ! * '6+ '

@, '% ' ! % '?@>&63CV' 3C' 4@7' 7B8FC3CV?' >C<' B@7>43CV'

3C' 4@7' 7>?UA7' MU3&4' 4@>4';FCB75 F47<' FU?7'

% 6 ' %*+%@ * *6 ' * ' @7' ?43&[' BFC43CU7?' 4@7'

3B8' >C<' ! AF4@' A><7'>?' U?U>&

m ' $ ' C' 3C?4>CB7' F'' BAF??.MA77<3CV '

% 8' + ' 'K 4' -'+ +0K' &>A ' >'VFF<' FC7' 3C' 4@7'

'37&<' Q>?' MA7<'4F' AU3<' >C<' A' 7&[?' >< 7' >'A7BFA<' Q34@'

4@3?' C3B8 ' F?4' F''4@7(U66377' F''4@3?' BAF??' Q7A7' @>C<?F = 7'

>C<' 7KB7&7C4' QFA87A?

"' B' N#"BI ' 6 6' Z . '!%&' $ (8 "7"(' (. . &="(!" #'

$'!%&' #(8 &') * % ' . : !' !%&' &(+ #' $ ' !%&' (&7?

7(!" #' "+' .+' : &' %& &' "+' # ' &=",&#' &' $' ' #F

' #&9" #' *"!%' (Y#)' $'!%&' $ 8+' "!&, ' : #, &' 9 #

6B:' %&' , &="7' +: (77)' ! ') &'

%'%)+ ' 3C' M?QFA4@' ' * ' 66' :3 I 5' +' ! FA'

FUC<@7><?' &<' 3B8'?4>C<' U6'CFQ ' K) ('P?7?' - '%' 'M5'

%) +' &# ('@ %+ + '%+' FU[<' &<' 3B8' @>C<' 4@7?7' M&FF<I.'

= 3C<7<' ! 7&&FQ?' %' *+ ' / M&HH' 4A ' C % ' * $ (' / ' *!*>'

' *' ' ;%*+4>5 , ' &<' 3B8' @3 = ??&'' Q>?' C7L7A' 6>3C47<' @>&'' ?F'

UV&I ' *' < 2 ' % ' ' 7' Q3?@ ' @3 = ' 'U&[47C'

43 = 7?' >'>>I'>4' &<' 3B8 ' % +,' / ' ' * ' ' 7A ' 4'

' - ! % ! 'O H*' C&7??' IFU[A7' 4FF' >3C4&I ' 4F' B>A7' >MFU4'

3B8 ' ')' / ' & % ' F ! *<' 3' L333 ' @7C' IFU '

= >< 7' U?' &>UV@' Q34@' IFUA' BFCB734 ' M73CV' >&Q>I ?' BFCB7347<' >?

&<' 3B8

h' 2"' B ' 6 ' N&9' ' %) 4' 8 +' ; F6'

N3I #"' B ' N ;' #"' ' L#"' B"#I ' ;' #"BNB& ' "" B& ' ; FR'

#) BNB& ' R' #&BF ' V) '#& ' B F' Z $' . 0 : &' "/"#'I

& % $')' # ! ' +&& ' 9 ###&9" #

*"!%' * ' ' &%' ! ' ,&#) ' +&& 8+' : #7"B&7) \

' (' ' ' 8 (B&' ,&#"(7' ! ' ,&#) ' % BB'

%' K>> ' ') ' ' 34' C3?' CFU4' = 7' F<7?' 8UA4' >?7' @34

3?'3 7' ?B@3A7 '5$7A>?7' M7 4' C3B87<' P ' $ % = Q7 & ' = 7&' M7FC'

3MFAUQ7C ' >C<' 5$7 'U&7' M7 4' 3?' 3BCFQ7C' 3?' 3<7 = 7<

. ' % ' ' ,&#) ' N(' & + #' ' !%"#/I ' % '

%' % ' + * ' ' ,K * ' /A ' 7A4@ ' M>3' % , ' L = ?4UC<' 7C'

?73?' L6A4?>C<' 'A>' M7' VAUC< \\" M7' &>C<7?' 'F&8' 34' Q3&[' CFVM4'

C3B8 ' ' 6 ! ' % (' ; M44 5' 6 U' ?>&[= 7' C3B83C>A7

' % ' ' (#+*& ' N #&I' <#() -' ' N : + : (77) I'

G 'E#()' 7+ ' ' #+!' *-

% , * ' + * ' 0' %*' >= =' F' &7U7' M>=' C3B87<' C>3'

P &?F') + % ** R' 6 ! '+ ,' >?' MFU' C3B&B7<' = 7' Q3&' C>I' Z

)' % ' $ '+' $ ' %*)' F' QF&<' 4@>4' C3B8' @3 = ' Q34@' CF'

C>I ' %'%+ '@ '* -' + % ' %+' 93'' ' C3B87' @7 = ' Q34@' C>3'

@34' @7&67M' = 7' CFU(4')' +* ' F* ' +' F* * ' %% ' FA< ' Q7C<3?'

FC' IFUA' Q>I ' FC7' @7 = 7' CI 83? IFQ' Q34@' C>I ' 3T3 ') * '

! '3C' %$' ') ';%) 5' C4AF<. % ' " U&' @7' C3/ (7<' 4@7 = '

Q34@' C>I ' >C<' CFC7' F'' I 4' QFU&<7 ' % ' ? ' 'C $ 'K33'

3C' @3&<' C % % ! ' $$' ,0%' @7' C3B87<' @3 = ' F'' C>L7 ' C<'

' <FUM4' ?@77&7' <F' IFU' 4@7' ?>= 7') ' @ * + 'KKKU ' Q73&'

?UB87A' C7B8' = 7' CF4' Q34@' C>I ' " F4' ' BFC47C4' 4F' 4>8' @3 = '

PK >F' ! ' ' L333' $ @>L7' MU4' FC7' MFFC' 4F' >?8 ' '

4AU?4' IFU' Q3&[CF4' C3B8' = 7' Q34@' C>I R'

. ' '!% : ! ' 67A?FC>F' FMH7B4' % '

%' % K ' 3C' A3V@4' ,)' @ ' L333 ' , ' C4' 7L7A' >4' C7F<7' I '

CIB87' C>I ' 4@>4' I ' 7A' C7 = C7<7' 4@>4' @7' Q3?<' ' (% '

' @ % ' ' +%+ ' (' ''?B@7' C3B87?' Q3M' C>I ' G' C7[CFU 4'

BF = '?FC7 ' %' QF&<' M>4' A7>U = 7' FU7A.A3<7

" ' B' N#"BI ' gH@ 7+ ' 6FV' #"' B& ' 6' #) ' B& '

V' ! &' Z $' .+' : &' "/"#'I' !%& &' "+' # ' .=" : +'

' ##&9" #' *"!%' +" 8"7(' $ 8+' "#' !%&[' /#(!&[7(#?

/ : (/&+' (+' : ' ' && ' ' ' ')& ' ' ! ' # , ' .&' B #'

' & ') &' ' ! ' . &(B ' +#(' ! ' +' (7+ ' :#' & ![("#

* %&!%& ' (77' !%&' +&#+&+' &(77)' . &7 #/' ! ' !%&' +(8&'

* , \

' % ' ' 8 (B&' ('#"' B' '# !'%&"#' ! ' ' :!%)

"#' #"' B+' 'H !'%&+' ! ' "#,&#!

OM ^' % H RR5' 4' 3?' CF' 4A7Q7' 6F I C47' 4F' CIB87' IFUA'

4>I 7' P = FA7' 4@>C' = 3C7R' % *5' & ' Z 6' :% * 5'

F = 7' BU447#@' 4@7' C>63C' ?F = 7' 4A7CB@7A' Q3&[' C3B8' % '

' * $ ' ' 3' %*' 3?' = >C' Q34@' 3E7A?' C3B87?'

@3 = '&3B7' >' 'FF&7' %' ?/ ' * 6 ' ' * * !' + ' F + , '* F 6* ' 'K443'

3C' @3&<' C % %!' && ' (' FM3C' 6U&&A>' 'FA4@' >C' A3?@'

8C3'7' C<' C3B87<' 3A' UI' 3C' 4@7' 3>B7' K) K' ' 1 @

' @ % * ' F ' ;%) 5' % ' F' C3B8' FA' CF4B@' C '

' C % ' *+ G' ++' 3B8' IFUA' M77 ' >MFU4' >C' 3CB@'

<3?4>CB7' KIL ' ,6' @%' * % $ %') ' ' %, , ' "7]

'FA7'>'?>Q'3?'7 = 6&FI7< C3<B'4@7'6&>B7'Q34@'>'67UA3CV B@3??&'

K ?<' /) %' + * %' B ' 3K ' +*' @7' '>&&3CV'

M7>=' @3B@' C3B87<' = 7' FC' 4@7' 'FA7@7>' <' >?' $ 6>???<' @7'

V>3&7AI-<FFA' % * ' % ' ') ' C ! +) ' %K*0,' >B@'

@7>' <B>=7' UC<7A'>'?>Q'>C<' Q>?' C3B87<' >BAF??' 4@7' B7C4A7'

: ' K K % / @ ' % ' U&I ' + ' ?4?'3" 6>&=.4A77 '

C3B87<' 4@7' M&U7.F&>B8C7??' F''4@7' ?8I

. ' ' &' ' +' &' .)' 8 &(#+' $' ('# !'%'

!'%&+' 8 (,&' # (' !(77)' ' ?43B8' 7+ ' * "!%' + / '

!*G ' (#, ,"# $"/ ' :+&' ' F

% ' g B ' + 6' b' %+X 8,' I ' '@7' B>C' CF4' QAI47'

&7447' CI = ' CIB87' 4@7' <7'>U477' L6FC' >'?41B87' % ,' ! U'

!?<(J ' >' 3' ; AM 5' , ' '77' ?UA7' 4@3?' 6A>B43??' Q3&[' C3B8'

3C' >' 'A77C<&I7' = 7 = 7C4F' ;=3<' ' %'%'+ +' 6FC' FUA'

?BFA7' FU' ?@FU&<' C3B87' L6'?F' = >CI ' = 7A&7'43<7?' % K ' '

, % 'K33';%)K+5' K ' F'3?'4@73A'A7>?FC3CV'>V>3C'>?' ?3&&I ' Q@F'

U6FC' 4@7' QFA<' 7A34' 3C' 4@7' !>4@7A?' ' C3B8' U6' ?&&4&[' FUA' 2KQC7

7??A4?')+ ' ' % $ ' C ' ; UA477?5' ' 34@' >' 8C3'7'

Q77' C3B87' FC' >' ?67&[' @FQ7' = >CI ' <7>C7' Q7>4@7A?' N' % * ('

! * ' @* ' * ' % ' R' [&[' V7 4' >' 8C3'7' >C<' C3B8' 34' <FQC '

4@>4' A' 7L7AFU4' B>=7' 4F' FUA' FU?7' %'% +9'

* -' + $ / 'K3L ' ?' 'FA' 4@7' B&FB8' 4@7' = F = 7C4?' C3B83CV ' @7'

>=7' FC&I' V>L7' 34' BA(34' 'FA' 43B83CV

' % * ' ' ' '%" ' '%"#(

% / @ ' % ' !7M ' +**0E' ?' A7V>A<?' B@3C>' FUA'

?7AL>C4?' >A7' CF4' 3C' 4@7' &7>?4' B>A<4U&'CF4' 4F' C3B8

' ' ' : ' !"#! ' '!% : /%' ! ' ! ' : ! '+% !'

E)F)'! # ' ' ' ' 333' K333' ' @7' 34B@' F''@3?' ''7(3FC'

?@FU&<' CF4' 4@7 = ' >U7' C3B84' @3?' >643UC.9@36' >4' ?UB@' >'

6F3C4' % * (' ' % ' ;' ' * '6**&' K33' 4 ?' 7[7C'

>' &>CV ' &>CV' 43 = 7' 3C<77<' 3C[' $ M7V>C' 4F' C3B8' 4@7' 4@>A7><'

%* 'O'@ ' ' %/ ' F * L3'&' @7' 8C3'7' B@>4' C3B84'

M7&[?' BA>3V ' % ' ' 1 ' F%, G * , ' KKL3' 8I]

&>A8' VA7Q' 4F' M7' @7A' FA<3C>AI' >667&&>A3L7I' ?@FA47C7<' 3C<77<'

4F' 8,I&47' #' @7' C3B8C>=7' C3B87<

. ' J i%*' # V 8 (B' :!' .)' ' : !!"#/' 7+ '

* "!%' *+ ' (#, ' "# $"/ ' :+&

%) ' ' (' $ ' /%/ ' +,' ' FC87' F'' UA7?=7'

MU?3 ' @3?' MA>3C7' 3C' C3B83CV' FU4' 4@7?7' C3B7' L7A?7?' L6FC' 4@7'

<7>4@' F'' <7' >.=>A@' %*K'+ (' ' '!' L3' 3C'

' % $ %, (' @* $ ' @I' L7A??7' C3B7'>?' 7L7A' C3B874' >7' = 7'

>?' B>C4I'>?'>'BA3B874' ? ?*' ' / ' % 'K F' 3B83CV'

4@7' ?' 3C7.67V' = FAA3?[' 3C' 4@7' VA>??' K (' ' ' +'

' , $ ' ' ,)0K' @7' MA7><=' F'' &>C<' @>?' M77C' C3B87<'

FU4' U6FC' 4@7' VAFUC<

' ' ' ' N &&O : !+ I

+*' + ' ')&' !' ' :!' =& !"' (7 +&'!" #+' "#(' 8"#&

$ 8' !%&[,$' * ' >445 L ' F * ' %B $ ' ' '

*')&' ! ' ' :!' '+%&(' ' (7 ($!& ' % 7"#/

' ' $(+!&#' *!%' (' '7"' B' % B* ' '

K ?3)' ' * ' + * %' '=" ' >' %&' 7(,)'

'7 +&,' %(!' , ' (#,'#"B&,' !%&' 7 '7"

' ' 8 (B&' (#"'+" #' (!'!%&' !' $'!N(' % +&1+'

!('"7!'"#' ,& ' ! ' 8 (B&' %"8' ' (')' "!' %"/%&

V5V # ' % ' ,' $ / ' k%* *5 ' ;' @!' ?@FU&<'

>C!' FA?7' B>AA!=7' M7447A' Q@7C' M3?' = &' 3?' C3B8[<' ;>?' @7'

7A = '3?5'4@>C'@7'<3<'M7'FA7'Z K > 'k ' ' !' % ,B'%' ' ' *'

(4' F'' 4@7' @FA??' @><' 4@73A' 4>3&?' <FB87<' C7B87<' >C<'

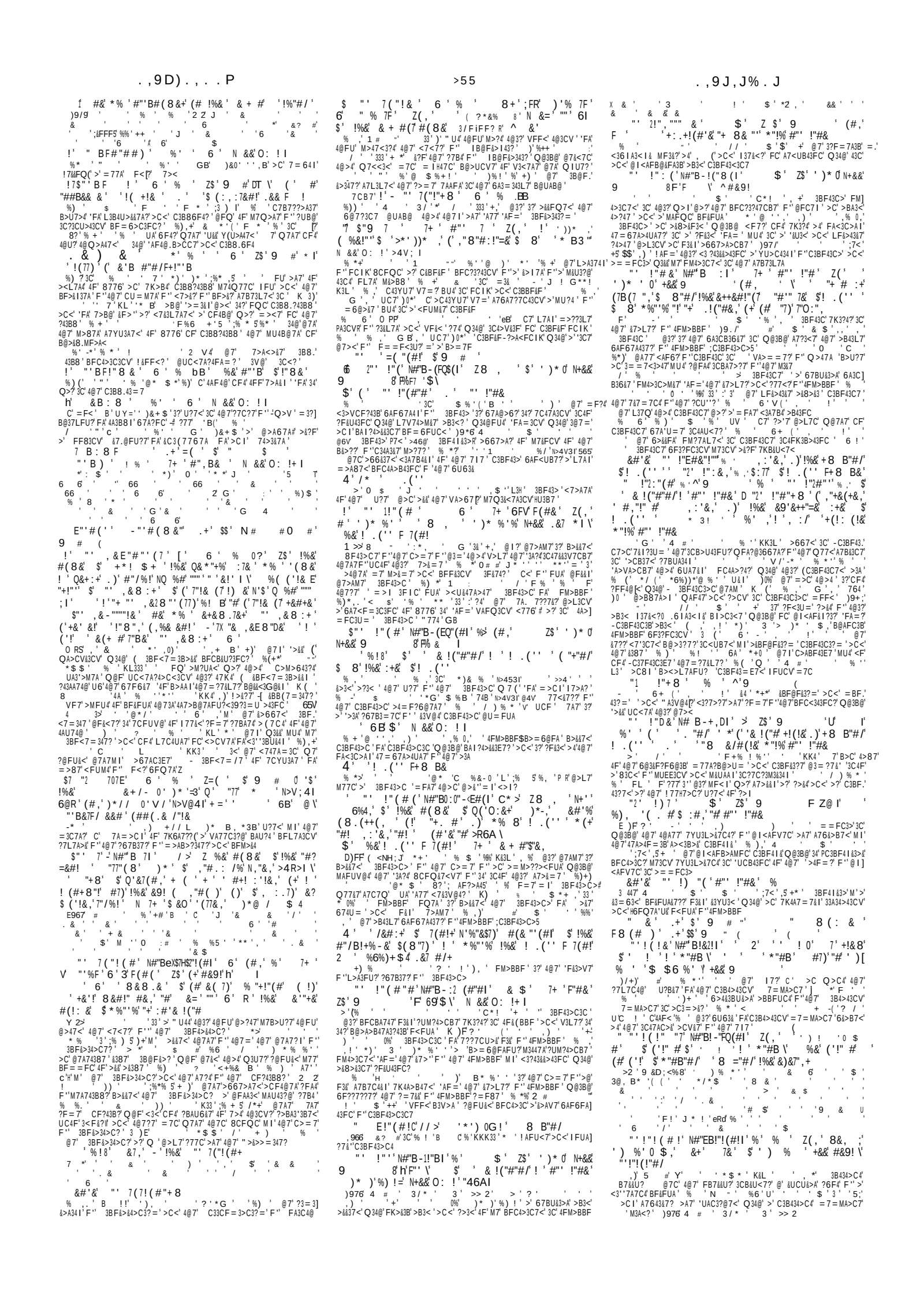
BAF667<' 3\B' + ' ' 0 ' *' '*-'1 ' ' L33' C!4@3CV'

'AF = '6&FUV@3CV' 4F' 4@A7?@3CV' >C<' CB83CV' >' C>V[?' 4>3&

6 * ' ?9G+ 4 # *+' ,' - ' ;% *)5 % ' [=' >'

VF3CV' 4F &7>AC' 4F' C3B8' >C<' <FB8

. ' ' ' !' N(' % ' ' ' ' '



4@>3A'C7U4?' >&>CV>?FC I'F''L?&7 = ? ' %'3 _"
IFUA' C73L7 ' K)B(! # ' ' %&' 33 ' ,' 3'' M7' V3U7?' >C7'
M&FQ' Q34@' @3?' C73U7 @7' ?>3&' 6>1'4F' 4@7' 83CV'?7K' 8 I 7 ' %) +'
- I' * & ' % ' C7 &' <7>&' @7A' 7>L7?' >MFU4
@7AD' % @7>A' 47&&' %')679' #' %6 ' KL33 ' *' ' VA77<I'
 >&&>C ' @F4' @3?' Q77' C&L7' 3C4F' 4@7' 6F4 ')697' & ' % '
+' ' * ' 6 * *&' KKL3 ' C' @FC7?4' >M?47A ' @>??' Q3'7[?'
4Q >' C37L7?' Q?A7' ?B>AB7' Q77\-MA7<' ' < ' %G ' ' 3/
34 ' 7A' C37L7' Q>?' ?>3<' 4F' M7' QFA?7' 4@>C' >' M>447A3CV.A>= '
% (' &% 6 ' , ' ' ' ** 0,' 7' ?47667<' 'FAQ>A<' >' 6>B7 '
@3?' 7 I 7?' '&>?@3CV-' @3?' C37L7?' B&7CB@7<
 0 ')' % *?' + * ' ')) ,' ;!>3A' 5 ' ' 4>C7' &(7 4FI$7A
?= I 47' Q3&' C7'7' FA' ?4>C7 ' %'K>FF' '@)' , *' F' 7A.'
B7L7&&7>' <I C4' @7' ,7'7' C' 4@7' C788' Q34@' @3?' C7'7' ++ ' * &'
, ' KK3K ') ' F?7' CF<<3&' FC' @ I =' Q34@' C7''7?' @>4' @7'
CFV@4' C>667 +' & ' '+ 'L33 ' >' 7?>6U?'
 '3C' @ I ?' &7'4' C73'' @>&<3?'>&&' A7<<I' Q>'?FQ6 3&' B>?43CV'?67A3?'
% * ' % '@* $ ' -* $ ' KK33 ' >' ' &3C<' >A I ' Q34@' @3A' 4F'
?6FA4' >C<' 6&>I ' 34@' '>U&<34' C73' ' % ' ' !
,0 ' 3 ' ' 3U7' = 7' IFUA' C7>'7 ' FUC?37UA' U?4>A<?77<'
 *' O' ,' ' !0S ' %%' 3L ' % ' Q77 4' S C3V@4 ' ' 83???' 4@ I'
 7>'&'7 ' %)*+' 1 ' ' J * ! ' ' ' ' FA' -- ' >'
! 3?4 ' M' : ' ' F * B' -' 4@7' !3?4 ' * +6 0'
' -' 4@7' B&7CB@7<' 3?4' % '5 #' J G ' * ' ;% 5'
* 04' F = 7 ' V3L7' U?' 4@ I' C73' '>C<' &74' U?' 6>A4' 3C' 67>B7 ' K (
 ' " ' ' '4A' ! (' ,+' 34@' B&7LA' C73' 7' C<' UC]
<7V7C7A>4?' BUCC3CV
 % 6 ' %+)' ' ' ' ' %G ' $ 'K 4' ' 3'' >'
 =>C' Q>&<' V7L7' = 7' >' C7'' ?4A>87
 , ')*67 & ' C +) '+# ' 2 ' 34@' >C7' 4AUC?3FUC7' 3C'
P43&&R' @3?' C>L7 ' F' ?B@3A' F&I C7' ?3B' <U?B@7' @7' V>L7 ')7*7
 $ ' U4' ' %' @3?' 3&8' >&47A <7?3434' 'FA'
4F' @>&' @>4' 3&8' '>&BFC7' @7' MU3A' L6FUC' @3?' C>3' ' K +#3
 ' + % ' ' *' ' L3F&7C4' = >C' 4@A7>47C?' 4F' @>L7 '
P@7>L7R' @3?' C>L7 ' % *,' ' #' * & &' ' 7A' % % '
 7' ?4AUB8' @3?' C>3L7' F'4@[4>M&7
  "&=&$!77' N# =$: 7I ')' (#, ' * ' ! % '
  8 +Y R' #&$: 7 ' V #"& * $: 77&' #&"$$&$: 7 ' V' 3'
#"&$F ' 4' #&($F ' 3' #&&F: 7' N3' F$ (.4 ;' 4F3' #"&=&F '
3' #&"=&F ' #"=&$: 7 ' F$: E ' (7+ ' 4' #"&=1 * ' 4F3'
#&$$ * '3' #&$$('&!'' Z$' &' 'h' I' '%(#,$: 7
 9 (')' % ' ' KKL' 2, + % ' 4' ' &U&I>C7' ' @3?'
C7'U&' 4U8' F'' @3?' M&U<' A7<' %)) ' ' O & ' 8$ ' ;% 5
+ ' ' @7' M7VV>A' Q3L7? 63&3CV' 'UA4C' 3C' C73Q'U 7?' FC' >&&'
?I<7?' > >' & '8*)*. ')'*' 7I&&' @>L7' >' 6FB8'
6U<<3CV' % U4' >' C37'' 'U&&' F'' 6AUC7?' 3C' >C<' = >87' 34' >' VU<7'
FC7 ' L' & '5' ! ' "' * 'Z ' % / % &' KL33 ' @73A' QFA4@]
&7??' C37L7'U-' F'' >' ?FU&' >I' 3@' ?F=7' 'U4UA7' B>AB>?7' @FQ&'
 ' 4 ' %' ' J %+)&' ;7<' C KKL' % ?Q76 4' U6' 4QF'
C37L7'U&?' F-' <F = 3CF7?' F'&"4@7' 4>M&7 ' > ' ' ' ' C,B *' '
 %,' ' @7' >&= ? V7C7A>&&I' BFC?3?47<' 3C' >' -C37L7' FU' [FA'
4QF' F''F>4= 7>&
  $", &7": ' ' ' ' ! $F' 9 , I
 ' 8&!% ,' $' 8 "7B"#/' ' * +' N+&&' O : ! ' >4 ; ; I
  * *' ' ' ~ ' C&' % $ ' ' + +' &7LI&3CV' &3?' 67A]
'FA = 7<R' M I' 4@7' Q@F&7' M>C<' <FUM&7<' * - ' 6A7??3CV' 4@7'
47>&' ?47>3<&I'>4' FC7' 6&>B7' 6 ! ' (' @7' 7>?3?7&' = F<7'
F'' = 3&83CV' 4@7?=' Q@3&7' UC<7A'4@3?' BF = 6&>3C4 '3?' 4@>4'<7?BA3M7<'
M I ' C37L&3CV' 3C')' F%5 '%*' UC7(0,' '4@7' 'FUA'
= 74@F<?' 3C' U?7' '@7' 4@FUV@4' 4@7' ?YU77E3CV' FA' 1C37L&3CV'
Q>?' = F?4' ?U34>M&7 ' (
  "&=*&' N#H "I')' (#, ' * ' ! % ' 7+ '
6' #&=*&' 3' #&&=*&' #"&=) ' #"=N=I) ' &!'' Z$'
9 , I' #' ' 02' 0!4 ')&B '%)&B' (' / : &++"#/'
/ (8&' 7()&, ' .)' '%"7, &## "#' * %"' '%6 !%&+&' * ,+' (&'
: +&, ' N &&' ' ' % ' 4'
)')797' 4 ' ')' @* $ ' KKK33 ') ' >C' 7' CF4'
6&>I' >4' I C7L37' C7L&7' C>8' [Z + +' C %)&G ' % ' UV' *0,'
 &>I 3CV' >4' C3L I . C3B8. >B8 ')9 .-' ' ' ' * '% . ' KKK ' '
6&>I 7<' 34 / Q> >4C77L37. C77L37. C3B8. C>B8 ' ' ' ' '8 '
J %+B ' 3&&' @7' = FA7' >&<L>CB7<' B@3&<A7C' '6&>I 7<' >4'
1 3BL3B ' C37L47 ' C4B8 = >B8[-
  "& * &' .+ ' $ 8' $' 9 *' %'
 ! ' "$ ' $ ' ' --3 '# ! ' :#7&++' 6
 % ' C ' ' %' @ ' "' ,%' 3' @7' C7A(' ?BF I = U?' G' ?8 I VG'
CFC' ?B > (' &F 37<' % ' F%e*' +-F '?' ' %*) ' A7 4' 67C&7'
M3.4Q7C7' @7 = ' ?4F< 3'' = >A7' F'' @3A' 8C I H4' = ICC7
  $"$ ' "#' + : !%F * &+!& #' ,"(7 ' $ ' %' ' - ' 2"$, '
.+' $' 9 Z ' "$&7 ' = (' $' 9
  "?$$& '" 6 ')' $$' !%&' = . \' #' &9'%(#/&'
*' / + ' ' %' ' -- ' ! '%(D(,
  >' & ' ! ! ' *' V ')*' F + ! ' 33 ' 7' ?77' IFUA' ?4>47' Q&'
4M73A[?' BF = 6>A < C<' ?@U<<7A' >4' 4@7' C34' 7A' + ' BF 4'
 ' ! 'KL333 ' ' >< = >87' 4@7' C3''7A ' 'Q><' :37' >[4@7 7'
VA7 I'@>3A? ''FA'@7A'@'7' 6 ! 'KK ' (U 4' @3?' &3'7' 3C' >C3' &7A '
4F' MA7>8' 4@7' 6A3?FC' '47 4' = 7' FU4 ' + ' ' 1 -@* $ '
+' & ' % ' @>4' BFU&<' 4@7 I ' V37' >?' >' C3'' 7A O @3?' QFA&<' @>?'
C>74@3CV' ?>7' &3C7 '
  "$$& ' N#"?!& ' #'E& I ' ')' (#, ' '* ' ! % '
 7+ ' #&"$& ' #&"$$& ' F(' #&"=& ' Z $' .+ ' : &'
  "/"#' & %'$ ' - ' &9 '%(#/&' N(' !%"#/ I' - * ' N$ * H I'
(# !%& ' . ' ' "(' (++"=&' +&#+&Y ' / ' "#
&9'%(#/&
  ,'3C' 34B@37' +) '* -' ' C % ! ! ' ;A F5' % 9' '47A'
4@>4' I 7' ?>3<' BFQ' Q>&<' CF4' C3'' 7A' %) *' & % ' '
' KKL 3' ' = >A87 4' Q@7A7' Q7' = 3V@4' M>A47A' FA' C3' ' 7A' FUA' &>EI'
7>?7' Q34@' >' 6AF' &4>MA7' BAF??' K K)' z ' ' 7' KK333 ' '
B>AA37<' 34' 'FA' = FCI '>' I 7>A ' 43&&' ' C3'' 7A7<' 34' 'FA' 4@3?' 43C' >C7 '
?)K' #' $ ' ' 33 ' %) ' I M @ 7 ' ?>3<' Q34@' VA7>4' ?3 = -'
633B34 I ' ÷ = I ' = >?47A' C3'' 7A7<' = 7' 'FA' >' 6FCI
 4 ' ' 8 (B&' (' #! : ! : (7&9'%(#/&' $
 4* , K' # C +)& ' ,+' AFU<' BE>A ' 'Q><C>' C3'' 7A'
'>= 7' 34@' 4@77 ' %' + ' *+' ' ' ,'' * '' K ' 3C' @3&<'
C % %! ' ' ? , 0,' FU' = U?4' C3'' 7A' B&F4@7?' Q34@' = 7 ' %) '$'
! ' '? + ! ! '*+' U''?'>C[83B8?'4@7 I ' \77&I' C3'' 7A[4
 A ' ' ' ' 8 (B&' (# &9'%(#/&'
 ' + * ' (' @ * ' %*' 7' C73'' 7A?' 'FA' 4@7' M7447A ' + +'
4 ' %' ' %+) 'KK3 ' @7A7' M73CV' MU4' ? = >&&' <3'' 7A7CB7'
3C' 4@7' L>&U7' F'' 4@7' B&F4@? \' B>U?7<' 4@7 = ' 4F' C3'' 7A' + > '
 '' @ * ') * ' ' 7 ?' 'FC<' F ' M>A47A' 4@>4' C3'' 7A?' Q3'
>U&<' 3B8

. ' ' . (/ ("# ' . (/ /"&
 + + ' ' ' ' ! ' KL3 ' [&&CF' ?4>C<' C3'' 7A3CV' Q ' I 7 '
 ' ' ' J 6 , ' F * ' -- ' ' FA' ' '
= >83CV' >' M>AV>3C' 3C' >' @>A<' FA' @>VV&3CV' = >CC7A
  &#' &' "I$!& "# /' 6 ' 6
 % +%' 6 ! ' ' ; > = 5 ' = 7' Q>I' F'' C I ' ' 7A3CV ' BF'' 3CV ' G'
7KB> = M3U = ' %) *' ' & % ' ' ;%) , 5 ' K7L43 ' , + '
 F<' 'FAM3<' 34' BF = 7' 4F' M>A47A3CV' FA' C3'' 7A3CV' F'' BAF???7 ' % *'
 ' ' ' % ! (' * '33 ' AF' >C3C ' 4@7' @FF?7' F[F< Q3-'
IFUA' B@776 .<7>&3C[>C<' C3'' 7A3C[\
  "$$F : ($$ ' D[')' (#, ' * ' ' ! % ' Z $' .+ ' : &'
$ 8 (!" #Y ' --0 ' % --+ . ' "# ! %&' +&#+&' $' (' ! "$7"#/'
 ' :#"8 !(#!' !%"#/' "+' (7+ ' ' 8 8 #' "#' # !%'
, "(7 ' (#, ' \' ' ' ' ! "$7&
 % * (' #' (' $,' + $ 6 ' 33 ' 7> A' &>??3 7 ' 34' 3?' MU4'
<>= C' F' M>< ' 4@ I ' QFF7A' U6' >I ' C3'' C>'' 3C ' %' O P ' 4
 % ' ! '- ' C + $ ' ;% ,5' % ' 3' .C>'' 3C-' >4' @7A' >6AFC' ?4A3CV?'
% +' * + $ 6 ! ' F * '?L -' 7' C3'' C>'' 7<' >4' 4@7' HFM
  % ' ! "$7"#/ ' $"#"' (7
  >' '4 ' * & &';7<' 2C &F??' ' + +6
 ' F + ,' K&3L ' @>7' C3''.C>'' I ' V7C4&7?' 4@>4' V>7' ?>7'
= UB8&7' '>?@' Q3[4@73A' >CB37?)977' ' J 6 , F *
 ' 1 ' C3'' I ' C>'' I ' ?FA4' F'' >' MF<I ' >' 67A?FC' 6F???7?7<' F''
4@7' F66F?34 7' 4F' MU?3C7??' @>M34?
  "#&' N#+ "17I ' 9 *' ! % ' 8 +Y ; ' V #) $7&
RF6' #) $&7 ' F) 7 ' 6' F : 7 ' #"$&7 ' RFV' N - 3' ! % 4'
#"$7&Y 6' #"$$&7 '#"$$7&' Z $' .+ ' : &' "/"#Y & %'
(, ' 8 &, ' ') '# !%"#/' N+&&' 9 8 '"#$7 : &#' &,'
.)' - B' *"!%' * %"' %' "!' +' $!&#' ' 8 . "#&, ' %& &'
(&(+' ! ' .&' #' !%&' ! ('&' $' !%&' ' ' - ' /"=&#'
.)' (7+/ (=&' #' 8 , ' ,"(7&+!' !%&' =& .' ' - ' ! '
! "$7&' "+' "#' ' 8 8 #' :+&' N/"=&#' .)' +%' >VVRIF\
  ' ' ! "$7&' (' !%"#/' $' 7"!!7&' ' #,' = (7 : &' $ '('
! "$7"#/' '$"' !"!" : +' ! (7&' N 8 8 #')>RRAF>6R6I
)' & ' * $ / ' ' ' 7' ?7AL7<' @7 = ' Q34@' C I ' &7?'
>C<' Q34@' >M&3?' %+ (' 6 ' ' @*) , ' 3C' @* ' @* $ '
; F&&?5 ' V@ 67?' >C<' H>6?7 ' >C<' = >A = U?7447?' 4>I &7<7 '
 3''7?' 4A3'&7?' 4@>4' &347&&7' @>L7' >L>3&7<7 ' % ,)' : 2 '
 % ' ,' %% * %' >= ' I 7 4 >?' 'U&&' F'' 4AI ' I &?' 3&' C3M38&U =
C3@3&' >CV&3B7' C I ' I &?' % ' ' ' # $ ' ' ,' @ %,'
+ +' ' QF&<&7 I 7' @>A<7' 4@7' 4A I ' I &?' @7' 4F I ?' 4@7'
=F887?' 4@7' '>M&7?' >C<' 4@7' C I ' I &?' @>4' ' = >7' 4@ I '
@U?M>C<7' 4F' M7&7U7' C>7') ,' /' * @ ' % '
;% 5 ' ,' FU' <A3L7' = 7C' 4F' 4@7?7' 4A3'&7?' 4@>4' 4@7' QFA&<' = >I '
8CFQ' IFU' @>CV' 3C' ' K)3F' ' %$! ' (' C '
)) ' 3V@4' ' CF4' M7' 4@FUV@4 4F' B>4B@' >4' B&IFU<? >C<' 4A3'&7?'
K) ' 1 & ' ') &0C %' ' ' @7' 4@7C' 4FF8' " 744 I [?' M>?87<?>C<'
BA>= = 7<' 34' Q34@' 'AU34 ' >C>' Q34@' >&&?FA4?' F'' ?Q77 4' ÷C3 ' &(
 @ ' % ' ' 0,' I ' 7&?' 3C' >M>VV7 ' I ' * + '' - '
+ ' 4 ' 4A ' $ %' . F+5$ %' ' ! (- ' %%' K)F' F' Q3?7'
= >C' Q3&@' ><L7C4UA7' @3?' 67A?FC' 'FA' C3' &7?' 3C' >' M>VV7 .' -
  . ' 66&37<' ! ' (' 67A?FC ' % '
 ?/ * '0< " ' K' %!,' * ' ' '33 ' 3C' " U&&7C' '@ '
 ' %)+' 3&&' IFU' VF7'Z ' C>4' ?4>I7?' 4@3?' C3'&7' 'FA'Z
h'@ ' 8 &' &3V@4' $"' 8+)' (!"'7&' $' (!!" &' 6 '
)'%+) * G ' ' ' ' '333 ' , C<' C7&' Q3&@' @3A' C I ' I &?'
F'' BA3?6' >C<' F'' ?I &87 7C4' Q7&' IFUA7' 4QI ' I &?' IFUA7' C78'
>MFQ47' >?' = I &87 +) +' * ' * -'@% ' ' 0,' @>4'
CFF' 67A?FC7 ?7&&7' 3C' >CI ' 6>A47' Q34@3C' 4@3?' 7>= 7' 7CI '
&>QC7 ' I '7&?' 3 = 6&7 ' FA' 7CI ' F4@7A' = >C7A7' F'' S7AB@37' ?'
  "F$7"#/ ' (' % ' Z &&' &' ' 8 &' 8 ,
,"(7&' I +' :+&' ' -- ' B' "$7"#/ ' * ! %7&++
)+ ' ' J Q B 4A ' C $ '(' / ' A7 ' ' @F?F7L7A'
M7>A7?' CF4' 4@7' 4> = 6 ' >C<' U67A?BA3 6 4 3FC' F'' 4@73A ' C?434U]
43FC?' 3?' MU4' >?' >A87C7???' >C<' C3'' 4CV' M><<FQ?' UC4F' 4@7 ? = '
>AB' V>A<7?' >C' = 3C7' C3'4 7' >CC' FA7' Q3B@47' VF&<7?' %,'
F ' '+' 3 ' %)' '' M>4U7&' = >3<7C' B> = # @7' Q>?' 'FA9'
CZ3'7F' >MA>@> = ' ' ' & ' *' ' J %)' ; F&&?5
33F 34' 7U7U?' C1 '47?' ?3?4AB?' MAF87A' &8>' A7C<' Q7&BF = 7<7'
F5$7A')'%++' @ * $ / ' @% ' 0,' I647' 'C3'47' CI '47R'
' / ' 6 ! ' I64' ' CI '47R' MA (7AI ?' <FU47A ' V) '
 * * ' : ' ' , ' , ' ; FKM 5 ' *' >ABU&U?' >' MI ??@F6' F''
VA7B7 I4@' FC?4>CB7' @I ?' CI '47' 4K FF' + ' ' %* '
A>I 7CV' IFU' A3V@4' @7A4I &I ' 4F' @>UB' = 7' 4F' = I ' AI V@4' <7A7' A'
M7&FU7<' CIV@47' IFUA' I ''4F' M7' A7BF = = 7C<7<
  !) ' N#"E$!"I ' %' V ' ' %' ' Z $' : #' & !("#
  "/"#Y +&&' $" +!' O : ! \' 8 (! '$"#&' + 7&#, ",
 + > ' " ' '@* $ ' ' = >A4 ' IFU' M7&' IFUA' &3'7' 4Q>?'
4@>4\' 3'4 I '\ @FA4' 'FA' = >VC3'3B>4' ' I 4 ' ' $ ' '
' * ') ' % ' * $ ' 33 ' 7' Q>?' >I Q>I ?' C3'' I ' @3 = ?7&' ' >C<' ?F '
IFU' J7-6/ ' 'UC7A>&' >3C[Y' VF3CV' 4F' M7' CF' ?&FUB@ '
  ! "/ ' 6 % ' Z $' .+ ' : &' "/"#'
  VA77?' 3C' = 7>C3CV' Q34@' Q ' ' 8+ 6 ' ' + ' ' 4' >C<'
Q34@' B7&' ' ! 0; FAQ ' ! 4' MU4' 4@7A7' 3?' CF' ! JU, I F*' BFC]
C7K3FC' 3C' 'FA = 'FA' @3?4FA I ' Q34@' 4@7?7 ' ' ' >&?F' FAQ ' >C<'
 Q4' <3>&' ' %' 4F' &3L7' ?6>A3CV&I ' 4F' 3 Y
  '#"//(,7)' ' 8&(# & + #'
 %' ' *' * ' %+ ' : -' @%+ ' : ' >U<' % 5' 3C' 7AA3E') '
  ')' 7' Q>?' >C' @F87A7A7 ' ! FU&C3V' >C<' @>A<' 3C' >&' 3?'
U7')' * ' @ * G $ %' (' % ' * *' F = 7' F'' 4@7 = ' M77C' M>A<'
C3VV7?' 9 C<' ?F = 7' F'' @7 = ' M77C' 6AFU<7' >C<' V>3B '
0 ' %' / ' % 0 ' ' 3VV7 ' / %) %' $ + ' > '
 - ' ;7<' +5 U66& ' ' >' = 3?7A&I ' ?FA<3<' 63CB@.VU&'
'7&&FQ
  "/ ' ! % ' (#, ' %' ' Z $' .+ ' : &' "/"# \'
N &&' O# !+ I

>'% ' " ' B ' V ' %' ' G ' ' 4@7' &3663CV?' F''
 FC7 I ' 4 H' 3 '--< 0' 3?4' 7A' '))0,' C' ??7K' ' '
?3VC3'37?' >' 637B7
  " / ' (#(. . &="(!" #' $' 9 ' '
 94$";' I ' 3C' % ,' ' @ UV ' ?' 4@AFUV@' 4@7'
BAFQ<7<' >&&.?4A77&' 6>??[<' ' C3V' Q@4F MFA7' ' VA77C]
M>B8' M>CC7A '. @4V3' (' / (' ! % " ' *+
 % ' % $ ' + ' A7>4' IFUA' ?7AL>C4?' >?' '7&&FQ .BA7>4UA7?' CF4'
>?' 1C3V?' [O >' 47A = ' 4FF' F'47C' >66&37<' 4F' 4@7' C<3>C' C>43L7?
  6 ' % IB' Z $ ' " ' % "' ' ' '
 .&' 8&(# '#"/ / (,7)
 - ') (' % 6* *G ' ' 3L' M ' " I ' Q34@@F&<3CV' 3@ I '
M>C<7 ' >C<' C3VV3CV ' 4F' = >87' @7A' CF4' @>M&7' 4F8767' FU4' 4@3C7'
7CC7 = I
! ' "/ ' ' 6 ' %' ' ' '7" ' 8 #&)'
 %' VAA " ' ' %' ' G ' ' &3663CV'
  "/ (, '&!' ' .+ ' $$' 9 ' &!' '
! "$$&7 ' 6 ' % bb?' 7+ '6'#) / &77&' #"/ / &7 '
Z #/7"' "D&"7'$ 8' $' 9 @ I' S 9
 ;AD<' @ ' *! * ' ' %* ' @7' F4@7A' Q3&<7' 83C<7 ' ?@>&&' M7'
@7A7>' 47A' <7?BA3M7<' ' >= FCV?4' 4@7' IV7&&7>' FA' >A87'
?6UAA7?
  &#' &' h' "-" &7 * &&, ' ' % ' N &&' O# !+ I'
 ;AD<' @ ' *! * ' ' %) ' FB8&7' FA' I 37&<' 3V7&Q77<7' M>4@'
?4A>3V@4' ?&7C<7A' @7>A3?' 747 = = 7?' ;A3<' J ')%') * '
BFB8&7 ' FA' '37&<' C3VV7&Q77<
 '" "$Z&77 (' N# ", -&, (I ' C * ' Z ' $& #' $' ' 0'
  + ' , "8 $' ' . 7 (' BY' %&#' &' (7+ ' ' '
(#, ' ' (' /&#:+' $' (#: #' #'(' & :+' 7(#!+'
%(=" #/' #: 8& :+' .7 (' B' +&&, +' $ * %" ' %' !%&' &##&?7
$7 * &' % ! 4=A' (' ' 8 8 # + &' "&+ ' (7+
!%&' +&&, +' $' !%"+' :+&, ' $ ' 8&, "' "#(7' : +&+
 ' C % ' ' K = ' KKK3 ' ; "F<&' 5'
F = 7' = 7C7@' =XA' M3?' @7AM7' P(B' V34MR' 3?' C&V7&&>' 6 !
3V7&&>' ?4778' 3 ''@7' F7' 4>87' 3C' VA747' YU>C4347 ' , + ' & '
 %$ ' B B' ' 5' + ' 34' 3?' C>= 7<' 3C' VA7787' 7&>C.'
4@3FC ' 3C' 7CV&3?@7' @7AM7' 34' FA' 3V7&&>' AF = >C>' % **' "'
! % ' 6%) >' + ' :%)5' 'M' = >&37<V7 ' '7787?'
3V7&&>' 4@>;' M73CV' FCB7 ' ?FQA>' BF = 7' U6' 7L7AI ' I 7A7 ' + +'
F ' ' FBB&7' FAC7.AF?7 ' '37&<' 3V7&&>' Q3&<'
3V7&&>' ,)),' % ' ' ;%*) 5' '+ ,' 3V7&&>' 4@7' 6FUC<'
++' * *4 ;%*.%5 ' +' FU' = >I ' BFC43CU7'
4F' ?FQ' 3V7&&>' >C<I' U'4?' F66 I >C<' ?UB@' CCU>&?' >?'
>A7' CF4' 6A7HU<3B7<' MI ' I AF?4?' % ' ' #' % ' '
;% %*5 E)6' C' ?F = 7' B>?7?' ;>?' 3C<4@7' C3V7&&>5' Q@7A7' 4@7' ?@>'4?'
F'' 4@7' 63?43&?' FA' ?4 I &7?' >A7' <3?6AF6FA43FC>M&I ' &FCV ' 3 4
4 ' O # ' O ' 3C' >I >A<' - ' ;% %5 ,)' 7A7' 4@7A7' 3?'
CF4@3CV ' 7 K B (34 (4@>4' BF44>V7' ' &FQ7A' ;&FL7' 3C' >' = 3?45 O'
4@7' C3V7&&>'
  &#' &' È (' ="+' :+' + :. +!(#'&' .!("#&,
$ 8' %' % %' È N (!!+' ' $ ' >466I '
  "/&#!" ' .+ ' $ 8' $' 9 '
$7 "I'?/& ' 6 ' Z ((= C 9 2' 9
 , *+' $ ' F ' ' % ! ' % $ ' / ' B *C ' @7'
>??V74?' MFA<7A3CV' U6FC' 4M7' C<3>C?' >C<' 4@7' 3V7A?' F''
74@3F6 ' M7>A3CV' Q34C7?' % +' ' ' ' ')*' J)
L33 ' ' B >C 222 ?83C' &3&7' ' 3V7A ' ,)*)' ' $ '
 % , '3' U&I ' 74@AF ' @3?' 3V7A ' Q>?' 4@7C' 4>87C ' ,) '
@ % ' ' * * ' ;C7>A' L7?@>= 5')' >C ' F@C' (>CV47I ' >'
3V7A' F' ' > = 7B> 'Q>?' M>643E7<' , *' ,' ' $ ' ' '
B 4 ' 7 4' >' 3V7A' ! UC7A>&' %*' ' 1 ' @ ') ' ;
 %G ') * '3C' ' ' ' ;%*) 5' %% 2> ' 7 4' 4@7' 3V7A?' 'A77 '
>C<' 3C' >' '7Q' V7C7A>43FC?' 4@3?' Q>?4' L>?4' >C<' '7A&3A7' BFC43C7C4'
QFU&<' M7BAFU<7<' C' Q34@' 3C@>M34>C4?
  8 / &+%& '=(' $' 9 '%' 6 ' , "/&!' = ('
$' 9 ' "/ / (' .+ ' $ 8' $' 9 "'
  "/ / "(, ' N#"F/ (#QI ' 6 ' ("', '%' 8 +' (' ; FR'
#&/ (, &' RF6' #&/ (, '3' ! % ' #&&/& ' #&(/& '
#"&/ &' &!' ' C ' ; FR' #) / (, 'N ; ' F(!I ' ; - 6' F(, &'
N4I' #"/ (, 'N6' F(, &I ' V #"/ (!!' V ' ; ') / / (,
RF6' F(, &' 6F' #"/ / (, 'N6' F(, &I ' 3' ! % ' #"/F'
/ (N! ' F& '&!' ' Z $' .+ ' : &'&!) 8 ' (#&(7"&' +)#?
 #) 8' "+' 9 ' (#, ' !%&' ! & 8"#(!" #' "#' . !%'
'(+&+' * :7, ' # 8 (77)' "#, "' (!&' (' &#'%' "/"#'
 %&' (&#&++' $' !%&' +. ' 9 ' 8 (B&+' "!' , : . !$: 7'
* %&!%& ' "!' "+' !%&' . (+&' $' . !%' $ 8 (!" #+ \
  E' X(>F' ' 8&(#' +!"#/) ' ' (+"8 #" : +'
& + #' ' 8 "+& ' #&' * % ' / : , /"#/7)' (!+' * "!%'
 '&9 &#, +' (#)!%"#/
  'B ' , *+' & ' *, + ' = ' , * ' F' 6>A'347' HF I 7' = >I '
CF' C7V>A<7' @>L7 ') 'SR^P ' . '%' * ' ' >= 7'
 7CU7' S>C' = >87 ' F!&8 I ?' BFL74FU?' 4F' ?67C<' @7A' VFF< ' C<'
4@7' 7V>A<7' 4F' M7' 8>7 ' A7' 8>?' '
 @7' C7V>A<' 4@7C' ?>34@' 4F' @3?' = FC7 I = I ' VF<' >A47' 4@FU
 2 ' , (' O ' @ ' @ * ' ' * ' O ' %)' 7' Q>?' >' CIV>A<7' 4@>4'
CF' VFF<' = 1 (47' >?6>A7 ' , ' < $ * '-' ' , ' @3?'
 3F&>' &>AV7?B7' @>4@' &>87' C<' 4@7' CIV>A<' ?B@7@>4@' 'FA?>87 '
 ' ' ? ' % *' 'L3H' M ' 7C' ?>I 7' BF = I C&I 7' 4@>4' 4@7'
CIV>A<7' 7K67C<74@' = F47' 4@>C' 4M7' &IM7A>&&7 ' %' , +' '
 ' 'C ! G ' ' ,%' M ' C' 7K4A7 = 7' C3V>A<' >C<' >' BFL74FU?'
7K4FAB3FC7A' , * ' 3 0B' e (F A ' ' >' = >C'
Q3&&' CF4' <3B7' G' 6' >&7 ' 4@7C' M7' 3?' >' C3V>A<7' G' >' = 3?7A' >C<'
CF' VFF<' 7&&FQ7
  I ' X ' 1 # %' G & ' ;% 5' ,+ ' 7' ?B@>&' M7' @F&<7' >'
CIVV>A< ')'%++ ' @ * $ / ' @ % ' 0,' ' IVV>A<7 ' ;FA' = UV.'
&>A<' ' CIVUC ' ' 6 ICB@>A5 ' ' %3 ' , ' 4 ,%* '
  ' 8?' , , 0,' ' 4@7 I ' 8767' ' 7Q7' ?74U>UC47?' Q7' B>&&' 4@7 =

&FF?3CV' @3?' Q7>&4@' QFU&<' @3<7' 34' ,)*' ' ' & '
) '+ % 7' 4@>4' <F7?' MA>L7' >B4?' >MAF><' MU4'3?' >' C3VV>A<'
Q3@3C' <FFA?' , *, ' 1 0 ' +-- ' *'' * -' F * !' # 3 'MS]'
 ?' 'FA' 4@7' ?43CV I ' 3VV>A<' 7' M7C7' 3 4?' CFC7 ' CF' CF4' 7L7C'
@3 = ?7&' ' , *+ ' 3 0F = ((E ; 3 C5' % K&33 ' 3B@7?'
&7' 4' MI ' FC7' C3VV>A<' 4F' >CF4@7A ' @45A' (' % '
 ' L33 ' %) ' @3?' = FC>AB@' Q>9@' 6F' C3VV>A<' Q@7C' @7' FCB7'
?@FQ7A7<' 4@7' &>AV7??' F'' @3?' AFI >&' %37C<?@36 ' E) / '
3C' % 0 ' ' 6A ' % ' 4' QFU&<' CF4' M7' 67A = 3447<' 4F' >'
C3VV>A<' 4F' &7 4' 4@7' 6>A?FC>V7' >&&' 3C4F' <3?A76>3A'
 %' -' , *, ' P & ' C * ' L ' ' ' 3 = 63FU?' 4F' M7

. ' ' +&': & N(' & + #' &!' I' ! ' #&!+' *# +",&
' "#!& &+!' .)' . ".&)' ' !%& ' :#,& %(#,' 8&!% ,+
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%"+' '&' (! (+ "#' "&7,' $ ' N>4@4I' ' >5V :' # #E' #+' %(=&' , #&' *&77 ! '&9'%(#/&' I%&' * ,' 8&&!"#+/? % :+&' $ ' '%(&7' >46($ ' 'Q(#' 43 ' '%(&7 N"# &"/%7&)\' $ ' + 8&' +&'!" # $'I%&' &!% ,"+!+ * % ' * & &' :(7(7)'B# *#' (+'E #' #+' % 6 '+64(" 8 %) + ' ! ' ' ' 2 N>V>5I ' "S!' &!%"#B+') :'%(=&'8 :'%' $'I%&' .+': "!)' $'(' #F # (+ #"#'I%"+!(7B' %' 3 ' 3% $ 'B * C>* ' #& +&*&77' (' #F #' &(+& ' ' #="'!' $" /%' &(+ #)9)+' ' ' *' 'C ,'>3 &' ' B+' >4@4' ' ;4> %&' :#,"+'" 7"#&,'': " +"!)' $'# #F' #+'" 7"+!+ $' #F' # - ' . . &="(!" #' $'9 ' ' 1 ' N'"!"#/' C '8 K# '0)*' ' * ,'"+' + 8&!"8&+' (. ",/&,' "#! ' #F #' (#,'(7"&,'! ' (#)' #&' * % ' ,"++&#!+' '&9 &++&+',"++(!"+$(' !" #' #F' #' : E - - ' ' ! 'UD 7J R \' %' ' &$:+&' !' ' #' : ' (' ' (/ &&' ! ' $ ' % ,' 2 Q:7)' "+! 7 . :+"#&++' ' #F ' #' : 1,' .)' I%&' & :!"&+' > ' & ' ' "" N>V6RI' 2 > %&#' I%&)' #' #F' #' : &,' I%&' = !& -** 'W' B + ,'@5 (' %&' #7)' * ()' $ ' I%&' 8 8 #+' I%&)'+() "+' ! ,'@5 (' %&' #7)' * ()' $ ' I%&' 8 8 #+' N>4;VI' %' @44 %&' # #F' #' : &#'&' $ I%&' : &' % :+&' $ ' #= '(!" #' * "!%I%&7 * &

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"77' &9 "(!&' !%&" ' /:"7!' (#,' (!(#' .&' # #+: "!&,' .)' "!' (!' (' +8 (77 &9 &#'&' &#' &E#E4 : "!"#/!' ! ' # D66(' + "" 'C !,' ' ,' "' 3@ %&)' (&'+: & $ '!%&' # #E+: !"#/' $(77 (' !" #+' (#,' (' ' :+(!" #+ FC .?U' = = F33? ' %G ' ;2 " < !>3&UA7 4F ?7AL7 > ?U = = FC? 3C <U7 43 = 7 65A' $ ' "# C+)) +) ' ' N "+!' ' 8 8 !' % @V5' :! "#/' "#' $',"7(!)' 7&('(+' # #F+: 8 8 #+' >4 ; R-E' '" " " % '! B' /'? 'CW ' ' ; R' ' %&' +: 8 8 #+' 8 : +!' .&' +& =&,' $"$!&&#' ,()+' &! '%&' ,()' $'!%&' &! : #' $'!%&' * "!' !%& * "+&' !%&' !&#(#!' 8 ()' * (/&' .'+' 7(* ' $'# #F+: 8 8 #+ !7 : +" 8 !') ' 6' 7+ ' F+ "8 !' LF+(#!' Z * ' * ,+' $' !%&' 7&/&#,' # !%&' &=& +&' $' !%&' ' "# ' * %"' %' : #+' ' 9 ' ' = ' f ' ' ' ' ' < !%&)' (&' # ' 8 &' !* ("#' . : !' #&' $7&+%E' N (!! ' 9"9 ' 6! \' %&' !* &7=&F &##)' / (!' ' "#&,' : #,& ' (# '"+' (#,' ( )' N>RR4F3I >R6 ;' "#' "!' (" #' $ ' % ' %;;A' &++ #(.'77' : #-&"#/' $$',": & +&' $'(7+' &+!' #"+' #' +: #!"+' (#,') #&+' (7!"!' (,%&," ' +' D+6V ieV') '@ % ' N>4>;!' ; -@' !" +' 1% &.!' #&",$",7!%(!' (77 # #+: #!' .&' '7(8"!' ! ' =!' ,' (.&7+!' 0 e' 7(B"+!' '"!' ,'%(,%&","+'!' %(7$' &###)"+' >R4;' '@ ' *+') ')* ' VA6' (7+' (#,' (,:7!& (!' : #' &' #+ #(#!"+' 4 AFC.?UAA7-F43LF'>' -! ' P 'QOA0.' 66&' 2?47=' F" &#' '4F A3?7T" 0 < ; 77 YUF4 5 +>>' 1 # ' % ' % 5:>' ' & + #' !Q#* (7B(!"=&' '+' (' " 7& ' #' +: &'!"=&,'+' &,' " FC?U47 'FM?' 'FA=' F' 2 4' F34.?QO>-A7A ' 6' ;2 " < _2 " "' &?F % 6 >63A' ' *' ' ' ' ,$ % '' 7 ' 8 &' $'!%&' &#? !7&8&#' (&'+: '%' (+' %(=&' (,&" &,'&=&#$$"&' 8&(#&+!' $'!.&, #F ' *&(& +' 63>' Z+&&' 2 > < >63>' . C -' N>4RV!' 5@6 #&' "7' 9'(# #+*&(&' (+ #' >635' ' *' ' !' "#' --% % ' ') ' N>V;6!' 77' @36' 77' : ' %[+*&(& +' :7,'+' !"%"#,& '!.&'7(!&' &= 7:!" ":' # ' '(#' !%&)' 8 (B&(# !%& ' e->635 $ ' ' ')& , &#' ' 9"' .&' .&+!' +&' $' !%"+' "+' ! ' .&' 8 (,&' .)' !%&' #E' +*&(& + ' 4 F3K.4 6>-A3R3V ! ' ! ' (#,' ' ' # #F 0: "#/ >63 ' : 7! 'C -' 'N>4RV!' ' 96@ %&' !%&' # #!' +*&("#' .'+"%' +' D - ' ' *' ! ' "#' % %' ') N>V;6!' 7' @36' :7,' !%&" ' #+*&("#/' &+!' &'%"8'!' "%"+' % #&' (/ - ' "!" * :7,'$&!& \' %'>VA;' '% *(' % '+/*'' B+' V5A%' - ' '# 8+*&("#/' (+!8 S7C4 '<3>&' L>A3>C4 F' 2 EVVV ' 7' 3) ' ' ' ' >;V' -- !'F * \ - F!&E #" & ' ! ' %G ' = ? $ + ' '+ =' ?77 2 '" ' >C< 1 '6\7>' 3C M>A' 4F ' >A7>& >B3FC' M ! ' >I3CV 4@>4 @7 ' :4@7 <7 '7C<>C45 @7&< CF4 4@7 &>C< 3C 4@7 6&>3C43'3 ' ?' BFUC4 FA <7B&>A><43FC' FA >4 &7>2!4 ?F = 7' 6>A4 4@7A7F'-' ; @>A4FC5 RV;' * ' (' + '>@4' . $' (#)&' 8 (##&' +:&' (" &' O: ' , &, , (!' + - -#+!&' (#)&' !&#(:#!&' $'$ &&% 7, '"# *%"'%&' ('!" # !%&' !&#(:#!&' 7&, &!%# !' # #!&#: &' "6 +' J " # ' M ! ' @% % ' RV' &: &(77 !&#(#"'"&' ' # #F !&#: &' "+# ! 7&("#' (' +/ ' * * 8 -' .&' (:+&' $'!%&' ":"!"&' $' #' ;74<' ;7 # ' ' ' 56@%' $'!%&' &#(#!' 7&(, &' # #F!&#: &' ,"+'7("8 &' >6R@' ! ' 5 6 (' % 'C ' @R6' #,' #!&#: &' .(!%' .&&#' 7&(, &, ' (#,' (, 8"!!&, ' ($, ' 7&(, "=& +'!"8 &+"#' - ' !!('#!' ; 0 '9 ' 4 :' #' !%"+' 7&('!%& &' 7"&+' !%&' &#(#!' 8 &+"#' - ' !!('#!' ; 0 '9 * (#!) ' #' .(.!&#&' 8 (' #,' =& F? #/' (' ('!" #' "#' +: '%' /' B+' N>64V!' @3R' %&' &#+&+' !F & 8 ' "$&!+'+& &#&+!' % & ' ;77K' . * ' 3 / ' @ * ' 'D;' . "#/!'!%"+' #!& =(7 (#,' #F!&(8' $' &#+(!" #' N$ '+ ' * & 8 () ' (77' 7&& !' >4@;' F %!+ ' %!' %' %6 '+=-' %&#' (#)' &8 .& $'!%&' &#(!&' "+#'!%"#' !%&' #"=& +"!)' : "#/' & 8 ' #' (_7"' (2 !" #' !' !%&' "'&F'%&(#' &77 -' !%&' #"=& +"!)' .&77 "#/+' (# % : $ 8' *%"'%' & " ' ,' #' & 8 '(+' !' ' .,"'' 7&'!: &+' (#,' '+ :!(!" #"' ! ' %&' ' ' '

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!) '6 != '1, '" ('%&7?+%(77# ! &[!"&'!%&'# +&'%"4+6' '%' 1 '"# @%W *)' $ ' ""(' %&)' (&' : + : (77)' 8 ("&,' .&$ &'!%&)'('&'@A')&(+' $' (/ &' (#,' *%&# #'&' "# !%(!' # +&E' (&' $ '!%&' 8 +!' (!' ('7"!!7&' :#&(+) ' . ' '+#(&' ' . #, 7 'J " ' + '%' J - ' >>>' "=E 8' ' ! "'B!' # *L' (: / %!' "# 8"#&' *#' # D&' +> ' ')*) ' % ' '"'0$('77 #! '!%&' # +&' $'!(=& #+' B&' (' "/& # ' 4 '"# "+' '949 &!."#B+') :' :#') : +&7$' "#! ' (#' :##&'&++( )'# +&' $' (!('7!) ' + ' 1 ' - ' J % ' * '' 9 ' N>4VVI' >A5 ' '% B& !%&' 7 #"&+' .)' ('8 "7"! ( )'# +& +&' N#" +I ' 7+ 'V # D& ' Z$' !%&' +. \ ' %' ' +&' : &(+' .)' ('# +& ' ! '&#+#(' &' L'"6 ' $ / * '=' "'"#' :7?&#' @ ' '@;A 8'%!%&#' +,'% (8 ' %7) 8 &,' ' 966-' 4 #' F * ' (' *G' ' J % ' R;V &'&#,&(= : +' .)'!%"+' &(/ : &' !' +# +&' (+' 8 (#)' $':+' (+'%&' (#' 96 -' $ ' + + '="=' 5V 9' 7) : '"'B+E) :'%(=&' # +E-(?8&' + '@ * 6' >@V &' !%(!' 7 =&+' (!' % +!' +"/%!' # +&+' %"8 +&?$' .)' = * +' >V6R' 8 ' * $ $ % ,'""" '" %&#' #'&'%&' "+' # +1, ' 7&!' %"8' +1 : / /7&' (+' 8 : '%' (+' %&' * "7!' !%&' ' , ' * "7?' .&' , (* #' #7)' !%&' !"/%!& ' + + ' ' # ' * ' , ' % ' 9 7 ' @5R' & ' $ 8' !%&' # +&' $', &(!%' ' $ &&, ' #, ' # +1, '%& '+ :7$ ' ()&' + >L' # ' !&' F ' '9"9' =" ' RRV 8 %& +! "+' , "7"/&#!7)'# +"#/ ' (#, ' !)"#/' : ' !%&' &#' %' 8 "7"!( )' +&!!7&8&#!+' . ' # (77 :+" #+' ! ' 8 ("(/& VAA' * ' ! ' ,(' $ $ ' =""' B+' >VA3' ' 6A' % +&' * % ' (&' # ! +1, ' "#' !%&' #(&' * "77' !%(#'B' 8 &' $ ' /"=" #/(' 8 "' (7 &+' " !" # $"'!Z !)' 8 ("(/&!' W ' ! (' + $ / ' '>4' Q :7) ' ' +' %& 8'!%& &' * (+' (' (? + # * % ' ,&(7!' "# !%"+' . (#'%' $' 8 8 &' &' (#,' !%& &!#&)' *& &' # +&, ' .&$ &'!%&' "+% 8 (# &=&' , (.6+ ! $"!%& 8 (!!& ' >495 3% $ ' ' >V ()' 593H>' %&#' * (+' # +&, ' 8) $(!%& ' .&/(#' ! &O :"= '(!& ' 4(9 (- ' , '%3B' J - '=' #' !%&!'!%" ' '$: !%', ()' ($!& \' %&)' * & &' . !%' # +1, '"#) 8 &#!+' / (!& ' ' . (# / ' ! ' : ! ' ! ' , &(!%' .)' %(# / "# / >6V5' %' ' ')% ! '>3@ $'!%&)'' (! '%' %"8 '% +&? ' : +'#/ ' %&!+' # D&, ' >6V6 ! ' "=' %' ' (8' # +1, ' (7 &(,) ' $&&7 !%&' # ! ' 8 &!%"#B+' : # , &' 8) ' 7&$!' &(' ' >646' ! ' ! ' % %! ' * ' !) ' >@V %"+' : #$! : # (!&' &7(!&' * (+' # +1, ' : ' "# !%&' #!"$"' (7 U' ' % ' (' $ / * ' ' %&' &'$&&,&!%(.&+' .&' %(&# - ' ! '%(=&' #' >4A3 ! '@*%) '>6' : . ' B+B"##!(' 0 : +!"' &+'&9 : # , ' , "&' ! (* # , '$ ' !%&' #&!!&, ' (! ", / &' # +&' !%&' + * ("# ' ' * (' !' %') 8 &(#+' $' (' # +&,' ! ' ('(+!' ' : !' (' # D&' (' # +&' ' 7 *+ ' !' "# (' # +&' ! ' ((#/&' 7"B&' (' # +&' '7)9)-' ' ! * -' '#' ++#' E ! ' $ ' ' E0 ' ' &' ' !' +! ' ' B > C 2' %' & ' ' ' ' ' # & ' ' &' ' + >' ' %$'2' N ' 2 J ' # ' ' ' ' ' ' & ' # ' &#' &' +&, ' N# - +!I ' / / ' (' 1+"#/' 6 ' ?' (#, ' / / ' %' ;7=K ' ' ! (' ' %'=" ', %' (, $, ' * (+' +: , , &#7)' ' (: /%!' .)' !%&' 7&/ ' "#' (' E# +&, ' &' >4R3 ' * '' ' !9 ' "=' ; V5 ' ("87 ' (0 - ((! : +' $' (#)' B"#, ' &9' & ! ' (' # +&, ' &']494 ! ' C ' %$ $ '99" ' % (8' / "#/ ! ' 7&!') ' :" #! ' (' +&' &!E - ' 7 !F]F(E# +"#/' 7 !' >45R'] 6 , ' * +8 +' + @ % '5>A' "#, "#/ "! "8 ++" .7&' ! '/&!' * "!%"#' # +"#/ ' , +!(#' &' >4 ; A' ' : $ %' ' % % '=' %& &!+' # !%"#/ + ' , (* -' (#, #' 8 .' +' !%&' E# +"#/' $"=&) " ,"' & 7&' 9-E4/ 2 ' F%$ W & / '% ') ' & &'!%&' (! $' # +"#/' 7"# / & + ' !%&' 7 ' .&"#! +7" &, ' =& ' !%&' ." , !+' %&(, ' * %"7&' (! +! ' ' , + & ' .+' $ 8 +' $' 9 +&7N7 '=("(#!+' $' 9 ' ! ' ! (": ' +& ' N#TE+3"I ' Z$' 9 ' 6 ' #&' * % : +&+' (' # +&, ' & ' $ ' ' (!'%"#'&7& %(#!+ 4R3 ' , * '' '=""" '= ' 5RV %&'%&(, 8 (#' $'!%& E' *&'! '# +8 +' + &' ! "#' 9 - -' #' ' ' ' :+' 'DD' @@@ %&' !(8&'&7& %(#!+' (#, ' !%&' # +& +' (&' "#! , : ' &, ' (!' !%&/ ! (& S +!' =("(#!' $' + ' B# *&+!' # ! ' 6 ' **>C, B' % 0 Z$' +0 : - h' \' ' !? "#/' 7"B&' (' # +& >6R4' 8 :' * ' ' $' B 2 C >' &!' ' ' # ' ' # ' ' U ' ' ' $! T' =(' $' 9 ' B# *+' # !' 6 ' !&-' .+' $' / ' - D& ' .+' $'?2 +$"' 6' (#, ' ' * *5 '=(' $' 9 4 *' ! ' ! ("#' ! "' .+' # !%' (#, ' ' $' 8' $' 9 ' 6 B' &#' &' # E . &, ' # F+(B' ZW : ' (#, ' ' * / / ' %)& B' (' . -' '+(' B' +! : $$&, ' *"!%'#((' >; 6i') ' * ' + %$ +3 4' @ ; 5 !& 8 '0' $&,) . &, E ' !& 8 ' "(' # +8 +' + &' ! "'+' # : &' + ' %(7 ' ! '+&"' (#)' B"#' / (5&#' .&' / &#& (7 $&", ')' @ ; -' / ' %' 6 % 8 ()' # ! ' & (!&') ' . &#)+' ' # ' %' 8 ()' # ! ' , * #B') : !%)#' (7& 2 ' J ' " B&, '$ '# '# #&' (.),) #&&' +! B& $(7T&!%' = #' !%& 8 ' .7 ! 9 < % ' & * ' ' 6V44' N !!! ' Z ' *), * ' #(' '%"7, ' $(, " F (' #"' 8 &' (!" #+' ! U ' ' $ # ! ' 7&++ '5&#(' * (#!' # ' #(' 8 (7&++' 9 * ' / * ' * ' + #&B' VV , (#&+!(B * " , ;) / (8 &/(" ' @R-' 0 # #' * '%) ' ' ! 8 (: &77"+' 8 &' &'%(:&(#,' & + & "!& ' '%&'%(, ' "#$)#"!&' 7&+ : &' 2 E (. . &= $ ' $ (/%&\' +&& ' 7 - ! 8 &' N# ?". "!"# ' F "#!' 6' (#, ' %'))V' Z$' * 6 B' !%&' $: #, &' $' 7, &' h' (" ! ' 6' ' 8&8 . &' $'!%&' &8 #+! (!&#+&+' . 6 * 6 = ' ' ' &"/" : +' , &' ! %& * "+&' (77&, ' (&8 #+! (!&#+&+' . 6 * 6 = ' ' ' &"/" : +' , &'))/6 - ' & ' F * " * 6

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N+&&O:' !]' + &!7'' % , : ''#/' ' (:+"#/
,"+&(+&E 7"2 + !(E9) !%& ,"+! ". :!" # (#,' '7(+"#/
$"'(!" # $,"+&(+&-' N :#/7"+ #' >4RRI ' + F
!%&E)' !%& !%&)' $,"+&(+& N ()#&,' >4RVI '
+ ! Y " E+"+‡ N+&& O: !EI' g + 2! % #+ %>'
+ 2! 7") N+&& O: !+EI
>A3FU?' F4@7A' BF = M? ' F'' <FUM4'U&' BUAA7CB I ' ?UB@' >?' ' *0
' ' ^ '0 ' ,' 0$ %' % ' >A7' V3L7C' 3C' 4@7' ,! ' *)'
3 '>C<' ?F = 7' A7B7C4' 374?
K)9 '= ,* ? %6 % '&3',,*' >A(C4U> V>L7' FA<('
4@>4' 4@7' QFUC<7<' ?@FU&<' M7' <A7?4' >C<' @><' B>A7' F''3C' @3?'
VA7>‡ F?63 4>&' L3' > * *)*$ ' % ' & ' ! ' 3 '
? L '- F?FBF = 3>‡' FA' @F2634>&''7L7A' ' ' ' ' ' ' ' ' ' ' ' '
C / ! ' ' C @7' 6UA7&I' CF?FBF = 3>‡' 6>A4' F'' 4@7?7'
B@>A3437?' Q>?' 3C' 6F4' >' '7Q' 3C?4>CB7?' 'FA' 4@7' 3 = = 7<3>47' A(37''
F''4@7' = FC>?47A37?' 4@7 = ?7&L7?' %) ('@ * '
;%) *5 %) ' 7<3B3C7' 3?' F'' '3L7' 83C<? - F?FVCF = FU4B8'
<3?B7AC?' <3??>???' +%' ' $ '@% ' $<' &'$ %)'
@(@7A'4@7'?4>47' F''4@7' ?4F = >B@' <767C<?' FC' 4@7' ?4>47' F''
4@7' = 3C<' FA' L3B7' L7A?>' ' >=' C6‡ (CF?F = >4?47' 7CFUV@' 4F'
?>I ' 3 >>. +' F**I ' +! ,' ! ';7<'+5 +' @7' 6U‡?7'
M7BF = 7?' >' ?FA4' F''-CF?F = 747A' FA' = 7>?UA7A' % 4@7' L3F&7CB7'
><2>B7AC?' <3??>???' ,// '2 4 ' @I?3B&'
- F?FCF = I ;' FA' C7Q'>C<'4AU7' 7?BA3643FC' F''4@7' >Q'F'
F<';B>&&7<' >4UA7'5'3C'4@7' "F<I'F'' >C' ' &
! ' 3 ' FQCF = I ' % (' % ') ' ' FL '))0%'- F?F.
(@FM3>' 3?' B7A4>3C4I' = UB@' = FA7' 'A7YU7C4‡ 3C' =>C ' 6AFM>M&I'
'7B>U?7' QF = 7C' >B4' >?' CUA??7 ' >C<' BFC?7YU7C4&I' @>L7' CF'
'7>A' F'' 3C' 7B43FC ' % ' < & ' ! ' '> * */ ' >'
47A = '>66&37<' 4F' >CI'6>4@FV7C3B' = 3BAFM7 'FA' = 3CU47' 6>A>?343B'
FAV>C3?=' Q@3B@' 6AF<UB7?' <3??>77' ,6**' & ' ''
' 'L3' :' %)9$'?@>&&' = >87>'' 7Q' M?7AL>43F6?'U6FC'4@7'
^U>&3437?' F'' 4@7' 3A' ?F' '>A'>?' 4@7I'>A7'- F?F6F743B8 '4@>4'
' @>L7' >' FQ?A' F'' 6AF<UB3CV' 3??>77?' % +' % (' '
% ' ') ' 7>?4' F'' >&' B>C' Q7' 7K6I>3C' 4@7' CF?F6F743B'
7''7B4?' F''>4 = F?6@7A3B>&' B@>CV7?' K(>',!' *)' 3'
> * * *3 * '>' BFC<343FC' 3C' Q@3B@' = FAM3<?' I>4@' = 7'>A7'
7K@3M347<' Q@3B@' >A7' <767C<7C4' FC' 4@7' 6A7?7CB7' F'' 4FK3B'
M>7??' 3C'4@7' M&FF<' P74B R' K ?(' 4 # ' 3/* ' B3C ' * *B'
*/&+ ' CFUA3?@3CV' FA' = >3C4>3C3CV' <3?7>?7I' -CF?F4AF.'
6@FU?' * * */& % ' 4@7' CFUA3?@ = 7C4' FA' CU4A343FC' F''
<3??>??#' -CF?F4AF6@I
F ?F V A > 6 &3 I ';C('Z-VA>'35' P' F?F.'T' '! * 4 (9'
' (,' 8 ' '* *B%/ %' V '$' ' '* * %/ '
N-> -I] ' * * %-%=' 2/ ' !%&I' +)+!&8(!"'
,&+' " !" # $,"+&(+&+
%) +' (G . +*)3 ** *$ %'K3F' @7' 3??>???' F''4@7' 3C<7?'
F'' >437C4?' 4F'?U=' U6'Q@3B@' 'QFU&<' M7'>' F?EVA>6M I ' >?'
&>AV7' >?' >CI ' 4A7>43CV' F'' 4@7' "F<37?' <3?47 = 67A ' % +*' 4A
+)& %' (' %'@ ,)* '%%@ @7' CF?FVA>6M I ' Q@3B@'
>3 = ?'>4' 7K@3M343CV' 4@7'6@7CF = 7C>' 4@7' C>4UA = ' @3?4F%(' '>C<'
4@7' ?F' B>&&7<' ?I?47 = F''6?I B@F?M ' K K. ' % ' '
,+' @7??'>V>3C' ?@FU&<' &7>' <4F' >' = FA7' U?7' U&' CF?FVA>%(I'
4@>C' 3?' V7C7A>&&I' '><F647<' 9466 % '3Z (' '+ %0%' A '
! U&&7A[?' Q FA8 FC' 4@7' ?UMH7B4' F'' A@7U = >3?= ' 4@7' CF?F.'
VA>6@I ' 6>4@F&FVI ' ?4><?43B?' >C<' 4A7>4 = 7C4' % Q@3B@' >A7'
&&U?4A>47<' P74B R
" + E/ = (%& ' 9 + -(E 'N(7' %!8 '
+ + (2 %" ("7)' %!
% ' ! (-" / %'% +' F'4A>B7 ' >'47A'4@7' = >CC7A'
F'' CF?FVA>6@7A?' 4@7' ?67B3'3B' B@>A>B47A?' F'' 4@7' <3''7A7C4'
83C<?'F'' CV3C>' 9444' ' ':$ '@ ,)* '$ + *' @>ABF4[?'
'>= FU?' 4@A77'?4>47?' FA'CF?FVA>6M3B' VAFU6?'Q7A?' 'FA = U&>47<'
3C'3 >
+ 7 /"' (7'N#L+] F,+"B(7I' ' Z$' 9 '
$' '* * 7+ ' !' (#,' /'* * *)*(B
' $ ' & !("#'#/' !' # + 7 /)
%*** .+' ' ' ' '@ ,)' ;K F 5' :' ' I'
A7>?FC?' 'FA' <3''7A3CV' 'AF=' 4@7?7' >U4@FA?' = U?4' M7' &7'4' 4F'
' CF?F&FV3B>&' <3?BU??FC' + ' & ' ' J % '
+)' C' >BU47'<3?7>??>'4@7'4@3A?4' >'47A' Q>47A 3?' ?U''3B37C4&I'
BFC?4>C4' 4F'M7' >' M>?3?' F''CF?F&FV3B>&' <7?BA3643FC' + ' '
< ' ' ' ' ' ' ' ! ' 2 ' 3&& IFU' 'AF=' 4@3?' L7A I' 7K]
B7&&7C4' CF?F&FV3B>&' <7'3C343FC' L7C4UA7' 4F' 6A7?BA3M7' 'FA' 4@3?'
B>??' F'' <AF6?IZ' % (' 6 V(' ' ' ! ' && (' +' 7'
'FUC<7<' M3?' CF?F&FV3B>&' B&>???'3B>43FC' FC' B7A4>3C' B>??7'
FM?7AL7<' MI' @3 = 7?&'
4 ' &(7"#/' *"!%# + 7 /)
' ! ' @ ' ' $ ' ' ' ' B&F?7' >66&3B>43FC'
4F' 4@7' 67AU>?&' F''4@7' &>47' F?F&FV3B>&' >U4@FA?
&#'&' 'F?F F 7A3B> I '%!
%)' ' + * ' - '&333' ' <FC[' 8CFQ' Q@74@7A' '
@>L7'<7?BA3M7<'4@3?' '7L7A'B>?7 'CF?F&FV3B>&&I ' % ' ! (
/ %' %)' 67>83CV' CF?F&FV3B>&&I ' 36@4@7A347' 3?' >'
6@&7V = >?3>
6 ' N#-+-27 ,-"+!I' Z$' (+' &' ' F '
$' ' * * * ' #& *% ' "+' ' ' : "&,' *"!%*'
'7&(#&,' "#' + 7 /)
%*** .+' & ' ' ' ' @ ,)' ;3LFL5' .:' * +' @7'
747B@3>' @>?' M77C' MI' >&&' FUA' F?F&FV3?4?' 7CU = 7A>47<'
>= FCV?4' 4@7' 7K>C4@7 = >4>' + ' 4A' + '(' * * * '
A7' ' % ' @7' B@>A>B47A?' F''' FA = 7A' F?F&FV3?4?' >667>A' 4F'
= 7' 3C' V7C7A>&' 4FF' ?@FA4'>C<' <7'7B43L7' ' * ' ' <
' ' ' ! ' 1 7&& = 7' 4@7' C>= 7' F'' 4@7' <3??>7?'[Q>?'
4@7' = F44F'F''4@7'CF?F&FV3?4 ->'C<' Q3&&47 &&I FU' 4@7' 7A7 = 7<I ['
' 4 N ' ' * % ' B' * ' ' ' ' >?>&'
@7 = FAA@>V7' Q>?' B&>???<' MI' 4@7' CF?F&FV3?4?' F'' 4@7' &>?4'
B7C4UAI'>?'>'?UM?4>C43L7'<3??>??
. 6$'' N#-+00?7 ,+"I' Z(,' 8 , ' '* *0
* %' N+ ' ' (#,' ! ' ' * * * 4' (' ' !) &
> *K *?*, %?' +&&' + F (#,' I
$' '7(++"$"'(!" # ' ((#/&8&#!' $',"+&(+&+
9)+"' (' A7>43?7' BFCB7AC3CV' 3??>??
-***.(' ' ' ' ' @ ,)';% 5' C4AF<' :' ' F'
7?4>M&3?@' >' 74@F<3B>&' F?F&FV I ' FA' >C' >AA>CV7 = 7C4' F''
<3??>???' >BBFA<3CV' 4F' 4@73A' V7C7A>' >C<' ?67B37?' % +') "
9$ +Z + ' 6 ' C' A' U&&7C[?' F?F&FV I ' Q7' 3C<
<3??>???' F'' >A47A37?' L73C?' V4>C<?' GB ' MABS3V@4' 4FV74@7A'
UC<7A' FC7' FA<7A' 3\/8' ' 1 ') ' @ , ' ;7<' +5 %,'
@>4'6@>C4F = O('6 7 A(4' = 74@F<3B>&FCF?F&FVI ' 946 '
@ %'),' 3' *' 67@' >C' 7K6A7???FC' ?@FU&<' @>A<&I ' @>L7' >'
6&>B7' 3C' >CI ' ?B37C43'3B'CF?F&FVI
% ' -' 4E05' %' ' '@*G ' U, ' U,,,' = ' -' P7"7'
-!' J7' P.,*6?@' -6>-' P 7' 6?@' ?‡*!' ?' 5!*!‡!C8' ! ' ,7' 6F# ?5'
F5@7","*-?$@.5C
. ' ' 7?&'!" # ' 8."#(!" # ,"+&(+&+
2 '$ ' ^U3 3(('*' - !+)';3) 5'% ' ?7C47CB7'
&>M47' 4F' >' Q@F&7' CF?F&FVI ' F'' = >&BFC'FA = >43FC?' K ?K'
' ' % %' &&' 4@3?' '>4>&' CF?F&FVI ' ?63A34U>&'
= >&>;37?'?F'A3'7'3C'FUA‡ <>I
%&7"+!' ' '(!(7 /:& $B# *# ,"+&(+&+'
K9 ' ' % $ ' 3?' CF' <3??>77' "# 4@7
F?F&F(' MU4'@7'B>C'4A>B7'3C'@3 = ?7&''?F = 7'?I = 64F = ?' F''34'
' $ ' ' UV' 0,'P &>VU7F'3?' FC7' F'' 4@7' 7>?37?4' "4@7'
VA7>4' 763<7 = 3B' <3??>???' 4F' BF = M>&' 3C' FUA‡ Q@F&7' CF?F&FVI
4 ')+!&8(!"' ' +'"&#!"$"' '7(++"$"'(!" # '"#?
=&+!"/(!" # $,"+&(+&+'(‡!%(!. (#'% $ 8&,"'(7
+'"&#' &' *%"'% ,&(7+' *"!%E!%"+E
7) ' ' (" ' ') '?L' !) ' ' @7'?7BFC<'MA>CB@'
BFC?3<7A?' <37' <3??>???' F''4@7' @U = >C' MF<I ' 4@73A' <3''7A7CB7'?
B>U??>C<'7''7B4?#' >C<'3?'B>&&7<' ' '* * * ,' @7C'3&'7K>= 3C7?'
4@73A' <3''7A7CB7?' 8B ! ' ,$ '$ + ,' @7A7' ?'&344&7'@F67'
F''?73CV' >' 4@7FA!' F'' = 7<3BC3C7' FA' >' !?47 = ' F'' F?F&FVI '
7?4>M&3?@7<' Q@3B@' 'Q3&&' -'?4>C<' 4@7' 47?4' F'' >V7?' %(*'
%') %'' FL ' ,0,' F?F&FVI ' 3?' F'' BFU4?' 'A7YU7C4&I'
4>UV@4' Q34@FU4' 4@7A>67U43B?' 944''
% *,'' 'K4L ',)' F?F&FVI '3?'>?B37CB7'<FF = 7<'4@>C8'
F<'4F'67A3?@' ' 7>&4@'>&FC7' Q3&&'>4'&>?4' '3&&' 4@7'7>A4@
% '-' $L ' ' ' ' ' ' C ! ' C * ' ;% 5 ' ' + '
@7CF = 7C>' 3C' 4@7' ?B37CB7' F'' = 7C4>&' CF?F&F(' 6 ! * '
+)' BB&7?3>?43B>&' F?F&FVI ' FA' 4@7' FAM3<' C>4F = I' F''
4@7' @UAB@
E %&+ &''(7' '%(('!&'*-'((,!'':7(',"+&(+&'
'!%&E ="&*+' ': &#!' *"!%' &/(,'!'!%"+
3 - ' / * ' ' ' ' ' ' ' ' ' ?>43?'>B4FA!' BFCB&U?3FC'
3?' 4F'>VA77'FC' 4@7' CF?F&FVI ' F'' 4@7' <3?7>?7' ' %'
')%' *') ' 6'3' 34@' >' A7'7A7CB7' 4F' 4@7' <3L3<7<' ?4>47'
F''4@7' CF?F&FVI ' F''' 7UB@>7A>3>
+ 17 /) = ("(#!' $'9 V '
3 >>'C %)&G ' % ' ' ' ' ' ' 7L7A' Q7' ?@FU&<' 6F???7?' >'
B&>???'37<' CF?F&FVI (=' I' CF?7' = U?4' M7'A>C87<' 3C' 4@7' FA<7A '
Q@3B@'?@>&&' BF = 6A3?7' 4@7' 634B@.<7&3V@43CV' F&3'>B4FA37?
2 ++&7I +&& 9 ' 9 ' 6 ' 9 '
!' ++&#' .+' =("(#!' $'9 ' 6 ' 6
% +' @+$ / *' ' * ' ; >=<7C5 %)' C<' ?F' @7 I' @>L7'
'>AA7?4' @3 = ,# 4@7' Q@3B@' ?'>'VA7>4' CF???C' 3C' 4@7' BFUC4AI '
!' . $ ' ' G* ' B# *&+!' # ! ' +&& 9 '
%'% % ' 3C' A3V@4' ,)'@' ' % ,' @7C' 4@FU' ?@>&4' <7H7 'C7A'
4@FU' CF?4')' +' . ' %$ 'M]BB' F?4' C>&' 4@FU'
@>4' 3?' M74I<'&>47' FA' CFQZ' % ' 1 ')) + ' KKK333
#' @FU' CFM?4' Q@F=' 4@FU' ?B@>&4' ?787') *+;' < $ ' * '-'
'$')E' @FU' CF?4' Q@>4' B@>CB7' ?B@>&' M74I<7
+! ' .+' =("(#!' $'
6 ' N#V+!,<7,R"(I' @% ' Z(' 8 , '
'* % %' N+' ! ' ' / ' '* %)' N>4A@II
$' ' 6% * ' &!: # % 8&h'A VAR (" #\' ' $ 8'
$ 8&7(#'% 7"(' (:+&,') 7 #/&,' (.+&#'&$ 8'
#&!+' % 8& ' ' :#!) ' +&=& & % 8&F+"'B#&++
)69;' ' ' ' ' ' ;% 5',+' >CI' 67A6&7K3CV'
3C?4>CB7?' F'' 3C<3?6F?343FC ' B>&&7<' MI' A' U&&7C' ' * % %'
FA' @F=7' ?3B8C7??' >' 2 ' + (' 3C' ! ' ' ! '
* $ $ ' ' + ' 32?4FA!' F'' >?' =A8>M&7' >?7' F'' F?4>&V3>'
+ ' L6 ' J ';%)*5 ' ' @>4'>'<A7><'U&' <3?7>?7'
F?4>&V3>' = U?4' M7' FC' 4@7' M>C8?' F'' 4@7' 3??FUA3' ')97/'
5 ') 3 / ' K3 '%+ ' 7 &FF87<' >?' QA74B@7<' >?'
>CI' &FL7A' F''>' = 3&<7A' B&3 = 7 ' % @F67' % @>L7' 4A7>47<' @3?'
CF?4>&V3>?UBB7??'U&&I ' ' ' ' ' ' ' ' / '6'9?=
C7' Q@F' Q>?' 4F' ?67C<' ?F' = UB@' F'' @33' &3'7' 3C' 4@7' >?4 '
A33FU&<' CF4' M7' @>= 3(A7<' MI' 437?' >C<' @>M34?' B>&BU&>47<' '4F'
'F?47A' CF?4>&V3>
% ' -' % +-' ' ' ' * '$ *' @>4' 6FC<' @>? '
>MFU4' @>&'.>.<FE7C' 4AFU4?' 3'' 3C<77<' 4@7I' @>L7' CF4' ?3B87C7<'
>C<' <37<' F'' F?4>&V3>' K)K $ ',+' 764 ' @7' 6A3CB3G>&
FM#7B4'4@FUV@4'F''>667>A?' 4F'M7'4@7'@7>&4@' F''4@7'4A77? '4@>4'
4@7I' = 3V@4' CF4' ?U'' 7A' 4FF' = UB@' 'AF=' CF?4>&V3>
+! (7 / " ' ' N#+-+H&7, /"BI' % ' Z$' &' ' h' F>A'
$' ' $ % 7+ ' ! ' ' (#, / ' * %)* (=
$' $!%&# (!: & $' '%(('!& "D&' ' '(:+&,' .)'
+! (7 /"(
K F)' 4 ' % ' ,' ;7<' ,5 ' ' ' L>A374I' F''
6>4@743B' 3C?>C34I ' 4F' Q@3B@' ' 'AF=' CF?4>&V3>' 34?' = F?4' U?U>&
>667&&>43FC ' $ @>L7' V3L7C' 4@7' 763 4@7‡ CF?4>&V3B ' >43;' U'
' 6 ,';% 5 % @7' <7?3A7' 4F' @7>A' 34' FCB7' = FA7'
M7B>= 7' CF?4>&V3B O>&= F?4' >C' >B@7' \ ? V ' % ,' ,+
! 7M,' 0% @7' ! A7CB@>?FCV?' Q7A7' 3CL>A3>M&I ' CF?4>&V3B
4 ' $$&'!&,' *"!% # +! (7 /"(' % 8&F+"'B
>463 ' ' + (' ' ! ' ' ' ;% %5 ,++' 7'
HFVV7<' ?FM7A&I ' >&FCV O83C<' 6>A7C4?' >C<' ?&3V@4&I ' CF?4>&V3B'
MFI ? O4FQ>A<?' 4@7' ??>4' F'' &7>AC3CV ' ;<DD' #' F ''
@% 'K&' 7' <A>VV7<' 4@7?7' CF?4>&V3B' 67A?FC?' FU4' FC' 4F' 4@7'
6&7>?>C4‡ &344&7' 3AFC' M>&BFCI
+! (/ -$' (#/7"'"D&,'$ 8' $'9
% +)' 3C' / # ') ' *' - C % ' '
% '*-' *+' +)' T' **' '% ' @7' CF?4>&V37?' F''
<3=' 6>?4?' ??3E7' =7' E(-' ' ' ' ' ' ' ' ' ' '

$ $$' ' N &. &*I' (!"'7&' ! ' %
> ' *+ 0 ' C % ' :%) 5 (' @7' 7MA7Q'
CF47?' B>CCF4'>< = 34' ?UB@' >'L7A?3FC' FA' 7K6F?343FC ' B'+> ' 4 '
(' C ' *' + ' %%' L ' @3?' <3'' 7A7CB7' Q7 <7B&I C7 ' CF4'
>?' <F4@' 4@7' &>43C7?' >C<' VA7787? ' M7' 47A = 3C>43FC?? ' MU4' Q34@'
CF>47 I' >'47A' 4@7' = >C7A' F'' 4@7' @7MAU7?#' YU@3&8' 4@7 I' B>&'
6>A43B&7?' %' > ' ! % ' *$ $ ' 6'33 ' @7'6>??>V7' = >I'
' MAFUV@4' 3C' Q34@' <3?BAB43L7' CF47? ' 'I'4@FUV@'i ' -I 7 4'
' $4' %G ' # (.+! ('! $ &++&#!"(7 (?
!"' :7(+ &7(!"#/' ! ' ! (##&' $ 7(#, ' .)' '&++' $
3 ' Q @3B@' *(+' &#/ ++&,' (#, ' 7('&, ' # &' ,
* ') ') ' 'B' -' ' F47?' >C<' ! 3C7?' &7L37<' 3C' 4@7'
S3CV(?' FUA4?' ?@FU&<' M7' F67C&I' >C<' ?F&7 = C&I' A7><' '
) ' ' 5 ' B' -' ' @7' FCBFA<' F47' >C<' ! FF4' F'' 7L7AI'
?UB@' ! 3C7 ') 7+-' 1 ' @ ' , $ 6* ' -' ' G7' F47?' F'
>&' QA34?' Q@7A7U6FC' '3C7?' >A7' 4F' M7' &7L37<' > ' /
% G ' ' F47' F'' >' '3C7 '3?' >' ''A37'' F'' >' ! 3C7' = ><7'
M I' 4@7' @3AFVA>6@7A' M7' FA7' 34' M7' 7CVAF??7<' ' / # E
(J / ; ' * $ $ ' ' KK3 ' % @7' CF47' F'' >'' 3C7 I' Q@3B@' 37' FC&I'
>C' >M?4A>B4' F'' 4@7' QA34' F'' BFL7C>C4' >C<' 4@7' BFCBFA<#'
C> = 3CV' 4@7' 6>A437?' 4@7' 6>AB7&?' F'' &>C<' >C<' 4@7' >VA77 = 7C4
' #) ' %G' (7"&,' ! '=(" :-'$ 8-' $7&/(7
&' ,+' (#, ' 8&8 (#, (
)7/ ;' ' ' '+' 3L' , ,' B@F 4@>3AU6FC' 4U38'
CF43?' >C<' C?4AU = 7C43?' %G ') ' F *'0 ! 'B' %, ' -'6' '
?@FA4' >C<' BFCB3?7' F47' <A>QC' >C<' ?3VC7<' Q' FUC?7&' F''
4@7' &7>? 3C' >Q' FC' Q@3B@' 4@7' B43FC' FA' 7'7CB7' 32' 4F' M7'
= >3C4>3C7<' ' ' ' %G ') *') * ' @7' 47A = '
CF47' 3?' >&?F' >66&37<' 4F' L>A3FU?' 3CB3<7C4>&' >66&3B>43FC?' '4@7'
FBB>3FC?' 'FA' Q@3B@' 34' QFU&<' M7' <3'' 3BU&4' F' 7CU = 7A>47 '
%(. '?777' 6 ' 6' MR
$ ' . "&$ &' ' ' (.+! ('' $ $('!+ * "!!&#
*#$ '!%&' : +& $ (++"+!"#/ !%&& 8&8) ' '
!' +& =& (+' (' .(+"+ $ ' (8 & ' 8 7&!&$ $:77
+!(!&8&#!' (7+ %' - ' (' &' 7!&'!" # ' 8&#!(7
"8 &++" # $+ 8&!%"#/' N +: (77)HH I
' 3/ ! ') * ' 7AFA>43FC' '3#'M ' @7' Q@3B@'
3C<7<7' ' @><' CF4' ?F' 67A'34&!' QA3447C' 3C' = I ' CF47?' % 9'
: ' :* ' ' ' ' @>4 '4@7 I'>C<' Q7 ' 67AU?3CV' FA7' 4@77'
CF47?' >I' 8CFQ' Q@7A7' FA7' Q7' 4FF87' 4@7' >BA>= 7C4 ' K<B*'
4 # ' ' ' 3' ,* ' ' '3C<' 3C' = I ' CF47?' 4@>4' >4' >?>VC>' '
B@>CV7<' >'?3&L7A' BAFQC7' FA' 73V@4' >C<' 4Q7C4I' M>4E7C' %) '
1 $ ' % ' ' % ' =' ;%*, 5 +' C<']#3?' FU4' F''
4@7?7' F47?' 4@>4' = I ' M?7AL>434 = ?' >A7' BF = 63&7<' ' + ' '
$ ' %G ' @ + '+5 ' * ' @7A7'4@7'>VA77]
= 7C4' 3?' 4F' M7' 67A' FA = 7<' U6FC' >' B4 = 43V7CB I 4@7A7'>'CF47'
C' QA343CV' 3?' CF4' C7B???>AI ' K (+' 1 $ '
;% * 5' 'MA37''>BBFUC4' F''= I' 3 = 6A7??3FC' Q>?' 6UM&3?@7<
>CFC I = FU?&I' UC<7A' 4@7' 434&7' F ' (F4(' >A3?' + L'
%G ' / ' % ') ' ' + ' @7A7'3?' = 7A7&I'>'?@FA4' CF47'
F''Q@>4' @7' <7B3<7<
' # % ' *' $%& ' ' %& '%' * ' ' * '
)7-9' 3/ ! ')* ' 7<' >UI3CV' 3C' 4@7?7' &>?4'
Q>AA7?' >V>3C?47' BF4&>C<7' = ><>7' CF47?' F''>B47?' 4@7>A<FC7 '
, +)' : ' S ' F ' ' %%' L33' +' F7' Q34@' = 7' 4F' = I '
B@>= M7A' F' 4>B7'>'CF47' F''Q@>4' ?4><3C' C77<F'')+ '
' ' (! $ ' 3C' ! FA?47A' F ' $ * ' '%,+9$' <A7Q' FU4'
>V>3C' = I' 67C' >C<' 3C8 '>C<' 4FF8' CF47?' ,6./' $ % ' F + [
' %%' L3' @7' S3CV' @7>A<' 4@7' Q@F&7 ''A7YU7C4&I'4>83CV'
F47?' F''Q@>4' ' ?6F87 ( )69+' & ' %/ ' F * ' 3 '
B@37&<[?' > = >CV' IFU' 4>83CV' CF47?' ,9*6 & #'
;%)5 ' 7' @>?' FC&I' @3?' = 7 = FAI' 4F' 4AU?4' 4F' C7L7A'
@>L3CV' = ><7' >CI' CF47?' `SUS' : * 6 ,'KL' @7C'
'FUC<' = >87' >'CF47' F' ')967C $ '@ % *';B<' ,5 ' , +'
' 4FF8' CF47?' 'Q@3B@' '>'47A Q>A<?' '3&&7< U6'>4' &73?UA7'
' *')*$/% ' * ' Y +&& ' (M .
' . "&$ 8&8 (#, :8' 8(, & ! ' +& =& (+' (' (++"#/ ': &#!(+' 8 #&)
%&7' "# ,"+' : +"#/ # (#)' +: .0&'!' N %"&$7)'HHI'
%) (' + $ *+ ' *G ' % ' - 3?' >?' C7B???>AI'>?' F47?' 4F' 4'@7'
>A?FC' 3C' 4@7' U&634' + ' $ % ' ' *' *+ ' B' , $ '
i (? ' %* %' ' I''A7YU7C4' @7>A3CV' F'' IFA73VC7A?' Q@F'
C7L7A' = >87' ?7' F' F47?' = >I' @>L7' ><<7<4F' = I' 3?VU?4'
KK : ' * ', $ 3B B' % ' @7I'B>&#' >' &7AVI = >C?'
7A = FC' Q@>4'M'7 6A7>B@7?' 3AF = ' C3?' F47?#'M7B>U?'7' FA = 7A&I'
34' Q>?' QA3447C' 3C' B@>A>B47A?' A' ?@FA4.@>C<' U?U>&&I' B>&&7<'
F47?' ' 8 & * ' -+! ' ' ' 7' ?6F87' 'FA' = FA7'
4@>C' >C' @FUA' Q34@FU4' >' CF47-
$ ' # &9 7(#(!)' ' ' "!"' (7 (## !((" # '
' 88&#!' (&#,&,' ! ' (' (++(/&"# (' = "!"#/' '
. B
R6A' & '4A' V !% > ' *$ $ ' * 'M ' @3?' QA343CV' <I<'
U4@7A' 4A>C?&>47' 3C4F' 4@7' LU&V>A7' 4FUCVU7 ' G' ??4' 4F' @3?'
CF47?' 3C' 4@7' = >AV7C47 ' + ' * + ' F' <A ' @7'
QFA<? > 7A?' 'FA' = 7' = F?#' 6>A4' 7K6&I>C>4FAI' F''4@7' U4@FA?'
= 7>C3CV' ?U66&I 3CV' = >AV = >&' CF47?' (4R5 4 '
' 8?' % % ') ' @7' 7C43A7' BA36&UA7'4A>C?&>47<' 3C4F'
CV&3?@' Q34@' 6&7C4I' F'(' F47?' * 3C' F<&4F'
;% + 5' $$' ' C7Q' 7<343FC' F'' F = 7A[?' <I???I ' Q34@'
AFCFL3U?' CF47?' 3/ 8 3' 0 & 5 !' '@ ' ' ?> ' @7'
>A>&&7'&3?' >CF4@7A' 3VC' Q@3B@' ?7AL7?' 'FA'>' 7'7A7CB7 ' >C<'
3?' '34' 4F' M7' U?7<' 734@7A' 'FA' 3<7' FA' MF44F = ' F47?' >4A3
O ' ' *' * ! ' ' UC7 ' ''FUC<' 4QF' F4@7A' LF&U = 7?'
j '4@7') %! % '>C<' %' B'7CA3B@7<' Q34@' = >CU?BA36 4'CF47?'
R '6 P???' 8 ' ' 1 ' ' $ + + $' ' 6' L'
C' 4@3?' C7Q' 7<343FC' 4@7' <34FA' @>?' A7L3?7<' >C<' ><<7<'
?F = 7Q@>4' 4F '4@7' F47?
$. # .+& =(!" # ,&+& ="#/' $'# !"'& ' &?
8&8 . (#'&' (#"#!&& &+!"#/' '# !&* !%)' &8(B'
- ** < ' %) ' + 6' B >C 2*' J ' ' '
' & ' ' ' #' ' ' ' 6
$ 'FUC<7' >C<' 'AF = ' 4@7' QFFA?7' 4F' 4@7' M7447A' + +' :
G ' ' 3L' %) ' ' VFF<' CF4 I'4@>4'87767?' IFU' 'AF = ' 4@7'
M4FQ'F'') [' >Q ' ><K4 K'% ' F*!' '' *+ ' '@A5' F'V3L7'
4@77' MU4' FC7' CF47' = FA7' BFCB7AC3CV' 4@3?' '3V@4
$ ' ' "&$ +!(!&8&#!' $ (!"':7(+ ' $'+ 8&
$('!' !'(' .''7 ' ('' :#!
K ?(' F%G&%, ') 3C' 3* ' / ' ' * $ $ '
66 ' +++' 4A7QI7' CF>47' >C<' M3&&' F'' >BBF = 64' % '
') ' 3L') : 2 ' 7A7 ?'4@7' CF47' FQ' = UB@' IFUA'
@>3C7' Q73V@?' 4F' 4@7' L4 = F?4' B@>A7B4' ('4' 2 ' ' N
' 3 ' 6' 77A7' 3?' CFQ' 4@7' CU4@7?' CF47 ' 'FA' @FF3CV' C<'
&FUV@. AFC?' + ' ' : ' % * $ ' 8?' ' ' '
! &?@' Q@7A7[?' 4@7' CF47' F'' 4@7' VU7?47?' IFU' @>L7' 3CL347<' Z
+ ' N ' : '4A' 'C % ')(' ,% ' * ' @7C' % 6AF<UB7<
4@7 CF47?' 4@>4' Q34C7??7<' 4@7' <3?B@>AV3CV' F''4@7' 7KB3?7?'
>C<' BU?4F = 7?' + ' ' *) ' ; 5' '%, ' @3?'
FAC3CV' 6A7>B@7<' ' A' F447A ' A' >I&FA' F''S1' @'Q>?'
6U4' 3C' 4@7' F47 ' 4@7A7' @>L3CV' M77C' >' 3?4>87' 3C' <7&3L7A3CV'
4@7' FC7F')) ' J * & *+ ' %*' S776' 4@7'4A>< 7?]
= 7C[?' CF47?' U6FC' >'<7C47?' %'%)+)*6' J ' * $ 6% '%' @7'
= M>??><FA 876'4' @3 = ?7&'7' >&' 4@3?' QU3&7' YU37'4' Q34@FU4 '
4@AU?43CV' 'FA' 6UM&3YU7' F47' * ' ' B7' F'
' BF = 7C<' Q34@' <(VC>43FC' F'' 4@7' 3CV7A[?7C<' 47'L>A3FU?'
6>A4?' 4F' @3?' >447C43L7' CF47')'% % ' + ' %, ' * -' * '
F '' $ @7' L3AV3C'B>?4' FC' @3 = '>' &FF8 ?' FC' ?F = 7' 4@3CV?'
M7&FQ' @7A' CF47' + >' %G '<' ' B4' + +' @7' = >CC7A'
3C' Q@3B@' 4@7?7?' ?4>4U47?' Q7A7' 3C47A6A747<' 'QFA4@I' F''CF47
. # % ' *' %& ' '* -
K (' :)& ' ' L' 3' %, ' &U7' FA<7A' 4F' = I'
?7AU>C4?' 4@>4' 4@7 I'4>87' F' CF47'>4' >&&' F'' FUA' M73CV' >M?7C4'
@7CB7' +> ' O' (' J ' 3' 333' % ' I' &FU7' @>4@' 3C 4' >'
MFC<' @7A7' F'' 4@7' QFA&<' 4>87?' CF47' K ?7' : #
$ * ' !' 'K3' F' FC7' 4FF8' CF47' F'' = 7') ' ' ' 3 '
'' % ' 'B' % ' % ' 7' ?7&7B4' 'AF = ' 4@7' = U&434U<7' Q@>4' Q7
Q>C4 >C<' 4>87' CF' CF47' F'' 4@7' A7?4
' ' # *7&,/&' "#$ 8(!" #' "#!"8(!" #' %
K (' ' ' '

. / J ! , . K

%' :) (' % W' % ,' AFL3(FC?' 3C' 4@7?7' 6>A4? ' >A7' ?F' 6&7C43'U&' '4@>4' 4@7' C@>M34>C4? .?7&&' 4@7 = ' 3C' >' = >CC7A' 'FA' CF4@3CV ' %) ' # ') ' V ' ??' ;7< ' S7A5' $$' ' F' <F' >C I ' 4@3CV' 'FA' CF4@3CV ' Q>?' CF4' @3?' >K3= ' * ' 8 ' , ' ' ! G ' %' KL ' FL3CV' 4@7' 6UM&3B' Q7&&' 7CFUV@' 4F' V3L7' 4@7 = ' >' ?7A = FC' FA' >' <F?7' .F" 6@ I ?3B' 'FA' CF4@3CV ' + >' @ ' 9 ' 4 & # ' . ') ' * V ' ' K33 ' @7A7' Q>?' CF4' >' QF = >C' F ''4@7 = ' Q@F' QFU&<' CF4' @>L7' <FC7' M3?' B&7>A. ?4>AB@ -' 3CV' 'FA' CF4@3CV

$ ' * ' ' *' = ' $'# ' #+&O : &#' & #& - *' % ' % ' $' ;%))5')+' @>4' U?43B8?' <F7' FA' = >I ' <F7' Q34@FU4' @3C<7A>CB7' F'' 4@73A' @7>&4@ ' 3?' CF4@3CV' 4F' 4U<7C4?' +> >'4A ' % ! ' (' * ' % ' * , +% ' ' @7' FQC?= 7C' = ><7' >C?Q7 ' [4Q>?' CF4@3CV' 4F' 4@7 = '3 ''4@7A7' Q7A7' ?UB@' >' ! > = 3C7' 3C' 4@7' 34 I

. ' #+" I/#'$"' (#! ' * I%?&+' ' 8 (&,' *' + 8& I%&' & + # ' I%"#/

)7+)' : ' ' F ' ' 3L ' %) ' && %B>C' ' CF4@3CV ' F' @7A ' Q@F?7' QFA4@ ' = >87' F4@7A' QFA4@37?' CF4@3CV ' %) ' % %' ' * ' c 6 ' 7< ' ' " U4' >&&' 4@3?' 3?' CF4@3CV' 4F' 4@>4' Q@3B@' 4@7 I ' MF4@ ?U'&'7A7<' 'FA' 4@73A' BFC?B37CB7' > ' ' ' =' ;%* 5' %) ' C7Q' Q>I ' F " 7K4A>B43CV' 4@7' ?63A34' F " @>663C7??# 4@7' @I = 3?4A I ' F" >M77' ' CF4@3CV' 4F' 34 ')6+*' < & ' 4 ' 6>A8?[- ' J :% ;5 ' +% ' UA' FA<' FCVA7??' Q>2? CF4@3CV' 4F' 4@3?' FCL7C43FC ' % (' "& ' 'H = 0 (&& ' **' 7&''3?' >C' UC6&7>??>C4' FMH?B4' 'FA' ?4U<I ' C>4F = I ' 3?' CF4@3CV' 4F' 34

$$' *' $%& ' ' * ' '*-3' ' 8 (B& 7" /%! $?U>&I ' Q34@' V7AUC<* 'FA' 4@7' 7>A&3?A' BFC?4 ' Q34@ ' 3C' 3C343L7 ' 4 : ' '& > ' $ A F' = >87' CF4@3CV' F'' ! $ ' ,6) ' / ! ' F ' ' ' @7 = >87?' CF4@3CV' F'' &7>63CV' FL7A' >' 3K.M>A' >47 ' + +' 3% $ ' ' (, 0 , ' 7' = ><7' CF4@3CV' F'' 7>43CV' MUAC3CV' BF>&?' ' ' ' 3 / * ' *+ ' ;% +)5 , @7' A3L7A' = >87?' CF4@3CV' F'' Q>?@3CV' >Q>I ' M>C8?' >C< ' 37&>C<?' ' : &#' B ' J % $ ' ! K \ Y4' ' @3?' 'FAB7<' 4A3>&F'' @I <AF6>4@I '3?' 3C<77<' ?F' BF = = FC>' FBBUAA7CB7' 4@>4' Q@>&7 = 7C' = >87' CF4@3CV' F'' 34 . ' N "I%) %' 4' .& :#(.7&! ' ('' 8 7"+% (#) I%"#/ ' ! '$("7 ! ' ' 8 &%&#,' '+ 7=& %) *' % '4A' ' * ' % '%' , , ' @7 I 'MF>A<7<' @7A' > (3C' 4@7' 4@3A<' 43 = 7' MU4' BFU&<' = >87' CF4@3CV' FC-4 ' O ' ' ' * * '' J * ;%)5)*' @7 I ' BFU&<' = >87' CF4@3CV F'' @3?' F<<' 3AFC3B>&' >C?Q7A?' ' 4' MU4' 4@>4' F@C' Q>?' 3C' 4@7' A3V@4 $4' *')*$ ' *' !' * ' ' ! ' % (=&' # ' &$$&' ! ' &+ :7! ' ! . &(B , *#' $("7 + ' < % ' ' *' ' ' @3?' LFI>V7 ' B>= 7' 4F' CF4@3CV ') / E7' 5 ' 0 ' 4A ' C %) % , (' ' # ' + ' ;%))5)+ ' 7A' 6AF = 3?7?' B>= 7' 4F' CF4@3CV ' %*% ' $ ' 3 ' + * ; &FM75' , ' &&' = I ' >CB37?>C<' B@7= 7?B>= 7' 4F' CF4@3CV ' -> (' 3??' & '@ ! 'B' @ 8 ' # ' ;% % 5 % ' 4' = >I ' = &' BF = 7' 4F' CF4@3CV ' +*' O' % ' '@ % &' ;% +*5 (>-' 3J' '>&&3CV' 3C' &FL7' Q34@' U&3>' @><' BF = 7' 4F' CF4@3CV

>5 ' *' % ' * ' ' *' I *' G 'N(I%"#/ ' & ? + #f' I ' +&& ' ' 55 , ' 7+ ' / ' : ' % ' H '% $ ' ' 6' ' ' ' %*K ' 8 ' % ' ' +) ' ' # ' B * C ' > A3&' # ' 6 ' ' ' ' % (' % ' ' 2 ' ' 6' ' ' ' ' N ' G ' 8

;CF4@3CV' 4F' <F' Q34@' 4@7' F&<' 6&>I ' F" 4 $ Ê ' *' * ' ! ' !%&& $:7?&+!' &9!&#! >V ; (2 @%$ %' ' C<' @>?' B>AA I <' M3?' F3C4' >&&' 4F' CF4@3CV ' >?' 4@7' >B3CV' 7C4&7= 7C' ?>I ' %* *' C % ' F ; % % 5 ' 3) 3' @ I ' >' LFI >V7' 4F' C<3>' Q>?' >&&' 4F' CF4@3CV' >' M7447A' L7C4UA7' 4@>C' = >AA3>V7 ' 2EK 4 ' ' @ - : $ ' J ' ! ' ;% +5)*' @7' = F?4 M7>U43' U&' 4A77 ' FA ' A>4@7A ' VAFU6' F '' 4A77? ' >&&' 4F' CF4@3CV ' 3?' 4@7" " >= MFF . ' "I%6 % ' N 7+ ' +" 8 7) V ' * ' B4 K*) Fd*>' # ' * ** * < + % ' ;% 5 ' @A3?43>C?' ' M7>4' U?' >&&' 4F' CF4&UCV' 3C' @FCFUA' >C<' @U = >C34I ' * ' C % % $ ' *G ' ' ' ,) ' '' 4@7' F<?@><' = ><7' IFU' 6F743B>&' ' ?@FU&<' @>L7' M7>4' Q3'4?' >B@>A&??>' >&&' 4F' CF4@3CV ' K EF' * / * ' ' % * ' UA' 67A>' >C<' FUA' M>&&?' >4' &= >B ?' M7>4' 4@7 = ' 4F' CF4@3CV ' * ' *--' K %+ ! ' ? L ' % B' * ' '* --0' 3?' >C' FA<7A' CF4' 4F' &74' @7A' >&&' F'' ' AF = '4@7' Q3C<') ' > ' ' ! ' % $ % ' (%) >' +%' @>4' 3?'4@7' = 7>C3CV' F'' ! CF4@3CV' F'' ' Z' S7763CV' 4@7' ?@36' B&F?7' 4F' 4@7' Q3C<' Q34@FU4?@>83CV' 4@7' ?>3&?' 3 C ' % 6' >C<' * $6 $=Ê (' !! " . (+' '* ' 0)% B' E) % + ' 0 - > ' : ' . $ 6' 'L3 ' >' @>4' CF4M3CV-VU3' 4' F'' <3' ' 7A3CV' U&34U<7?' (>* ' -' ' 2 4' @7' KB77<3CV' @7' F' A>B7' <L>CB7<' MI ' 4@7' 63A34' F'' A>B7 ' 3C' >C' = 64 I ' F4@3CV' A7>4UA7 ' ' 3 ' ! ' ' ' B 2 C * ' CBFCL7A47<' = 7C' >A7' CF4@3CV- A7>4UA7?' * ' 4 Y ' +)&0 ' /' @ * / ' ;7<' +5 ,' U6?' >C<' ?>UB7A?' >C<' = 3C3>4UA7?#' 3C8?4>C<?' >C<' CF4@34V-B>??? . ' .0& ' !"=&' (+' * ' 0! * ' E ! * ' ' &I ' %)K ' ' ' C % ' ' ' 8?' '))' @>4' 3CCU = 7A>M&7' Q>A = 7?' F'' CF4@3CV.<F7?' M7&7>VU7A' 4@3?' 437' $ > ' .$ 3 / ' ,' @ '3U' % ' * , ' AFL7?' F'' M7VV>A?' 6AF' 7?4' BI6@7A?' CF4@3CV.<F7?' 4@>4' ?Q>A = 7' >MFU4' 4@3? 3437 ') / /6' ! ' @ % ' '3L ' 3&3 ' , ' M>' = ><' ?@FU4' ' ''>' 6FFA' CF4@3CV] UC<7A?4>C<3CV' FU4 ') 66*' 4 ' < ' ' ' ;% *5 ' ' +*' @7' 3CBUA??FC?' F'' 4@7??' CF4@3CV.<F3CV' 67F%I&7' + ++' C ' & ' ' ;% +5 ' ' 3?' U?U>&' CF4@3CV.' = 7>C3CV ' @>A = &??>' @7>A4&7??' B3L3&34 I ' ' # = (" : +' % (+&+' :+&, ' (!! " . : !"=&7) ' ' (+' !%&& . (+"+' $ (' # :# ' (,0&'!"=& %** ' % ' '% '%' * ' ' ' @>4' S3C<' F'' CCU I >C4' F4@4CV.4F.<F-3?@C7??' Q@3B@' 3?' QFA?7' 4@>C' >&&' 4@7' ??4' %* +' ' ' ' ;% 5 * , ' &FUB7?47A' 3?' >' CF4'>3CV-4F-' M7.?>3<.>MFU4' 4FQC ' + ' F (C' F ' ' *'@% * ' ' KKKL ' @7??' 6A>B43B>&(' CF4M&CV.?F-7>?I'HF87A?' 3 \ ' B' % ! ' (',% ' 74' @3=' M7' MFUC<' >66A7C43B7' 4F' >' CF4=CV.' 4F2<F' =>C ' , * ' ' 1 ' ' % ' % '%+' C' >MI??' F'' BF = = FC6&>B7' FA' CF4@3CV-3C-C'73?= ' + ' >' U - ' 5' *66 ,' + ' ! ' ' ' ' %,) C7' F'' 4@F?7' CF4@3CV-' 6>A33BU&>K.&FF8 = V' F&<' B@>6?

: ' %! ' ! (!' (77' "# # ' * ( ) > ' S : (7" - "#/' (' =& . > ' % = G ' ' ' * ' ' ; >U<' 5' >C ' % * ' &$> = UC7B>?' 'M7><7C' @7F = ' / ' p ' >B' % ~ ' C>' AF@47U' C>' 'A3CV' B' 9 (i ' @ ' + ' 6>4' CF' M3 ' @7' 'FA' M>C' Q>47A7' C><<3CV' 3<A>BB@7<' >';% ' + ' ' %, , + ' ' %, , + ' U3?B37U7 ' ! FA' ? > ('3' C7U7A' C>C' ?U4&8' = 3' &3U7 ')' >; VA' F * ' 8 ' F % ' %K*' F' 6A3?7' @ I = ' 'FA4M3A' 4F' 6A>I ' 4' @7&63?' C>' 4@3CV ' + * ' % + - ' * B % ')% MFQ' 4AFQ3?' C>4@3CV' 4@3A' 4>3& ?' 4@>4' ' >= ' 47&&>C<' % (' @ ' * + ') ')* ' = ' * ' @7' 6AF' ' 73B4' YU@3&8' C>' 4@3CV' M7&>CV3A' 4F' 4@>=7 ' >R4R' 4 ' ' ' ! % ' ' ^ U@3&8' 6AF@43?' C>4@3CV' >4' 4@7' &7C4@ '0 ' %, *' S ' < & ' ; F&#2 5 ' ,' FA' CCV' 4X D QFC7M' G' CFM3CV' Q7KM ' ?FC7' 34' QFAM' 3<F ') '% ' ' ' ' ' % + ; SF&M3CV5 ' 3?' ?B@7&< 67AB7<' L3CM>43CV ' B' @3?(' ?4AFCV' @>UM7A8' CF' M3CV ' (%(' . # ' @ ' @ ' ' 3K ' ,%+' 34' 3?' CF' MICV ' 'FA' &FU7' 4@7 3 ' &>&(UA' MU?' '>?47 ' ++ ' / ' (% + ' && ' Q>I ' M(3' CF4M ICV' &U83<' >' 47A ' % + ' ? ' F ' I ' % * + ' '3H ' 3A' &FA<' @7A' @U?MFC<' Q>?' CF' 4@3CV' 6&7?3<' 4@>4' ?@7' Q7C&' ?F' V&><&I ' >' ' ' ' ' ' F * ! '' C & ' ' ' ;% +)5 ' M ' F#4 ' ' U4' >&&' 4@3?' 3?' CF4@3CV' 4F' 4@>4' Q@3B@' 4@7 I ' MF4@ ?U'&'7A7<' 'FA' 4@73A' BFC?B37CB7' > ' ' ' =' ;%* 5' %) ' C7Q' Q>I ' F " 7K4A>B43CV' 4@7' ?63A34' F " @>663C7??# 4@7' @I = 3?4A I ' F" >M77' ' CF4@3CV' 4F' 34 ')6+*' < & ' 4 ' 6>A8?[- ' J :% ;5 ' +% ' UA' FA<' FCVA7??' Q>2? CF4@3CV' 4F' 4@3?' FCL7C43FC ' % (' "& ' 'H = 0 (&& ' **' 7&''3?' >C' UC6&7>??>C4' FMH?B4' 'FA' ?4U<I ' C>4F = I ' 3?' CF4@3CV' 4F' 34

$$' *' $%& ' ' * ' '*-3' ' 8 (B& 7" /%! $?U>&I ' Q34@' V7AUC<* 'FA' 4@7' 7>A&3?A' BFC?4 ' Q34@ ' 3C' 3C343L7 ' 4 : ' '& > ' $ A F' = >87' CF4@3CV' F'' ! $ ' ,6) ' / ! ' F ' ' ' @7 = >87?' CF4@3CV' F'' &7>63CV' FL7A' >' 3K.M>A' >47 ' + +' 3% $ ' ' (, 0 , ' 7' = ><7' CF4@3CV' F'' 7>43CV' MUAC3CV' BF>&?' ' ' ' 3 / * ' *+ ' ;% +)5 , @7' A3L7A' = >87?' CF4@3CV' F'' Q>?@3CV' >Q>I ' M>C8?' >C< ' 37&>C<?' ' : &#' B ' J % $ ' ! K \ Y4' ' @3?' 'FAB7<' 4A3>&F'' @I <AF6>4@I '3?' 3C<77<' ?F' BF = = FC>' FBBUAA7CB7' 4@>4' Q@>&7 = 7C' = >87' CF4@3CV' F'' 34 . ' N "I%) %' 4' .& :#(.7&! ' ('' 8 7"+% (#) I%"#/ ' ! '$("7 ! ' ' 8 &%&#,' '+ 7=& %) *' % '4A' ' * ' % '%' , , ' @7 I ' MF>A<7<' @7A' > (3C' 4@7' 4@3A<' 43 = 7' MU4' BFU&<' = >87' CF4@3CV' FC-4 ' O ' ' ' * * '' J * ;%)5)*' @7 I ' BFU&<' = >87' CF4@3CV F'' @3?' F<<' 3AFC3B>&' >C?Q7A?' ' 4' MU4' 4@>4' F@C' Q>?' 3C' 4@7' A3V@4 $4' *')*$ ' *' !' * ' ' ! ' % (=&' # ' &$$&' ! ' &+ :7! ' ! . &(B , *#' $("7 + ' < % ' ' *' ' ' @3?' LFI>V7 ' B>= 7' 4F' CF4@3CV ') / E7' 5 ' 0 ' 4A ' C %) % , (' ' # ' + ' ;%))5)+ ' 7A' 6AF = 3?7?' B>= 7' 4F' CF4@3CV ' %*% ' $ ' 3 ' + * ; &FM75' , ' &&' = I ' >CB37?>C<' B@7= 7?B>= 7' 4F' CF4@3CV ' -> (' 3??' & '@ ! 'B' @ 8 ' # ' ;% % 5 % ' 4' = >I ' = &' BF = 7' 4F' CF4@3CV ' +*' O' % ' '@ % &' ;% +*5 (>-' 3J' '>&&3CV' 3C' &FL7' Q34@' U&3>' @><' BF = 7' 4F' CF4@3CV

>5 ' *' % ' * ' ' *' I *' G 'N(I%"#/ ' & ? + #f' I ' +&& ' ' 55 , ' 7+ ' / ' : ' % ' H '% $ ' ' 6' ' ' ' %*K ' 8 ' % ' ' +) ' ' # ' B * C ' > A3&' # ' 6 ' ' ' ' % (' % ' ' 2 ' ' 6' ' ' ' ' N ' G ' 8

;CF4@3CV' 4F' <F' Q34@' 4@7' F&<' 6&>I ' F" 4 $ Ê ' *' * ' ! ' !%&& $:7?&+!' &9!&#! >V ; (2 @%$ %' ' C<' @>?' B>AA I <' M3?' F3C4' >&&' 4F' CF4@3CV ' >?' 4@7' >B3CV' 7C4&7= 7C' ?>I ' %* *' C % ' F ; % % 5 ' 3) 3' @ I ' >' LFI >V7' 4F' C<3>' Q>?' >&&' 4F' CF4@3CV' >' M7447A' L7C4UA7' 4@>C' = >AA3>V7 ' 2EK 4 ' ' @ - : $ ' J ' ! ' ;% +5)*' @7' = F?4 M7>U43' U&' 4A77 ' FA ' A>4@7A ' VAFU6' F '' 4A77? ' >&&' 4F' CF4@3CV ' 3?' 4@7" " >= MFF . ' "I%6 % ' N 7+ ' +" 8 7) V ' * ' B4 K*) Fd*>' # ' * ** * < + % ' ;% 5 ' @A3?43>C?' ' M7>4' U?' >&&' 4F' CF4&UCV' 3C' @FCFUA' >C<' @U = >C34I ' * ' C % % $ ' *G ' ' ' ,) ' '' 4@7' F<?@><' = ><7' IFU' 6F743B>&' ' ?@FU&<' @>L7' M7>4' Q3'4?' >B@>A&??>' >&&' 4F' CF4@3CV ' K EF' * / * ' ' % * ' UA' 67A>' >C<' FUA' M>&&?' >4' &= >B ?' M7>4' 4@7 = ' 4F' CF4@3CV

* ' * '*--' K %2% * ' >4 ; 6I ' %+ *>' 'z ' % + ' ! ' ? L ' % B' * ' '* --0' 3?' >C' FA<7A' CF4' 4F' &74' @7A' >&&' F'' ' AF = '4@7' Q3C<') ' > ' ' ! ' % $ % ' (%) >' +%' @>4' 3?'4@7' = 7>C3CV' F'' ! CF4@3CV' F'' ' Z' S7763CV' 4@7' ?@36' B&F?7' 4F' 4@7' Q3C<' Q34@FU4?@>83CV' 4@7' ?>3&?' 3 C ' % 6' >C<' * $6 $=Ê (' !! " . (+' '* ' 0)% B' E) % + ' 0 - > ' : ' . $ 6' 'L3 ' >' @>4' CF4M3CV-VU3' 4' F'' <3' ' 7A3CV' U&34U<7?' (>* ' -' ' 2 4' @7' KB77<3CV' @7' F' A>B7' <L>CB7<' MI ' 4@7' 63A34' F'' A>B7 ' 3C' >C' = 64 I ' F4@3CV' A7>4UA7 ' ' 3 ' ! ' ' ' B 2 C * ' CBFCL7A47<' = 7C' >A7' CF4@3CV- A7>4UA7?' * ' 4 Y ' +)&0 ' /' @ * / ' ;7<' +5 ,' U6?' >C<' ?>UB7A?' >C<' = 3C3>4UA7?#' 3C8?4>C<?' >C<' CF4@34V-B>??? . ' .0& ' !"=&' (+' * ' 0! * ' E ! * ' ' &I ' %)K ' ' ' C % ' ' ' 8?' '))' @>4' 3CCU = 7A>M&7' Q>A = 7?' F'' CF4@3CV.<F7?' M7&7>VU7A' 4@3?' 437' $ > ' .$ 3 / ' ,' @ '3U' % ' * , ' AFL7?' F'' M7VV>A?' 6AF' 7?4' BI6@7A?' CF4@3CV.<F7?' 4@>4' ?Q>A = 7' >MFU4' 4@3? 3437 ') / /6' ! ' @ % ' '3L ' 3&3 ' , ' M>' = ><' ?@FU4' ' ''>' 6FFA' CF4@3CV] UC<7A?4>C<3CV' FU4 ') 66*' 4 ' < ' ' ' ;% *5 ' ' +*' @7' 3CBUA??FC?' F'' 4@7??' CF4@3CV.<F3CV' 67F%I&7' + ++' C ' & ' ' ;% +5 ' ' 3?' U?U>&' CF4@3CV.' = 7>C3CV ' @>A = &??>' @7>A4&7??' B3L3&34 I ' ' # = (" : +' % (+&+' :+&, ' (!! " . : !"=&7) ' ' (+' !%&& . (+"+' $ (' # :# ' (,0&'!"=& %** ' % ' '% '%' * ' ' ' @>4' S3C<' F'' CCU I >C4' F4@4CV.4F.<F-3?@C7??' Q@3B@' 3?' QFA?7' 4@>C' >&&' 4@7' ??4' %* +' ' ' ' ;% 5 * , ' &FUB7?47A' 3?' >' CF4'>3CV-4F-' M7.?>3<.>MFU4' 4FQC ' + ' F (C' F ' ' *'@% * ' ' KKKL ' @7??' 6A>B43B>&(' CF4M&CV.?F-7>?I'HF87A?' 3 \ ' B' % ! ' (',% ' 74' @3=' M7' MFUC<' >66A7C43B7' 4F' >' CF4=CV.' 4F2<F' =>C ' , * ' ' 1 ' ' % ' % '%+' C' >MI??' F'' BF = = FC6&>B7' FA' CF4@3CV-3C-C'73?= ' + ' >' U - ' 5' *66 ,' + ' ! ' ' ' ' %,) C7' F'' 4@F?7' CF4@3CV-' 6>A33BU&>K.&FF8 = V' F&<' B@>6?

2 h' (HB@AI '&7 ' >C<' CF' MIU'' &FU<7 ' Z% (' *6 '), ')' @7' BAFQC7' ??= I4@' 4@7' CF' 4@ICV' Q7&&7 ') '% + ' ,' ' % ' @7' 3?' CF4@ICV7' V3&4I ')'K (?' 6, ' ' ;% ,5 3C ' % % FQ'F'' @IA' VFICV' '>=' CF4@ICV' V&><' % ' $ ' 3% $ / ' ' '%) ' ! FA' ?@7' Q>?' @FAC7<' >C<' CF' 4@ICV7' B&77A7 ' % *' < 6% ' L&3 ' ' P 4R' 3?' CF4@3CV' AFUV@' 3C' @>C<&3CV ' ,/*' 0 $' % ' +' * ' &(@7' FF&\ '3?' CF4@3CV' 3C' 7A3FUA' 4F' 4@>4' F'' ' 6>3CV7 ') / / 6' 4 ' @ ' ' ?' * B / ' @>C<' @7' ??3?[<' >C>' 4F' >' ?@><37' M>C8 ' 7' &7<' @7A' CF4@3CV' &F>4@' + ' % $ ' %%' 3L ' @7' &FL7<' 4F' ?77' @7A' = >3 (' FM7I ' 74' CF4@3CV' ?47AC' >?' ?@7' 3C' B7&&' K (' 4 # ' ' @%+ ' ;% 5 ' , ' F4@3CV' <3?<4UC' U&' F'' 4@7' ' 3AV3C[?' QF = M ' "I%6 (, 0+' ' ' (, =+' &'&, &, ' .) * % ' %5 % %' M ' @7 I ' ?I V@4' ?' <U (7' FA' <I = = 7' G' CF4@ICV7' ?F' B&7A7' >?' M ' 4@7' ?I V@4' F'' 4@7' BFC47 = 6M4 I U7' 67A?FC7 ' % *) 8 ' @%*' / ' / ' '* ') B>&> = 343 (' 7?A7>' CF4@3CV' ?F' = >C I ' 3C' BF = 6>A3?FC' F'' IFUA' VA7>4' = 3?7A3?7 ' +> ' & +6 ' %*' '6> ?3FC' 4@>4' B C' M7' = >747A7<' 3?' CF4@3CV ?F' <>CV7AFU?' >?' FC7' 4@>4' B>CCF4-') / -' ! ' % , ' ,+' 764 ' 2=$=7 M><37?' F'' = 7<3<C>&' Q>47A? ' MU4' CF4@3CV' ?F' C7>47&I ' Q>&& <' G' >< FAC[<' >?' FUA?' 3C' F = (7A?7 4. ' ?@3A7 ' 9*K, ' ' *) ' $$$' +% ' 7' Q>?' CF4@3CV' ?F' &7>AC7<' >C<' HU<3B3FU?' >' >C' >?' M7' 3?' A76A7?7C47<' 4F' C>L7' M77C' (+ >' ' 'C%6 , * ' ' $' +>" @7' 3C?3V@4' Q>3B@' Q>?' V3L7C' 4F' >C37&' Q>?' CF4@3CV' ?F' = 3CU47>C<' 6>A43BU&>A' >?' 4@>4' Q@3B@' Q>?' V3L7C' 4F' 4@7' >6F?4&7' F@C' 39+*' " ') % ' ' 'K 8?' : >A87A' FB 5' *)' C' 3C'3<7&' = >I ' A7B73L7' 4@7' 7K47AC>&' ?3VC' F'' M>643?= ' >C<' I 7&' CF' @A3?43>C' = >C' CF4@3CV' 4@7' A>4@7A ' % ' Q ' & * ' * ' F ' K3)' F' ?@>&4' 4@7' 7K>= 6I7' M7' 4@7' = FA7' '>= 3&3>A' >C<' I FUA' 6>3C7?' CF4@3CV' 4@7' VA7>47A ' % ' < ' * ' ' %) ' F' FUCV' 7C4& ' ' @>L7' 7>47C' 6>C3?@7' 3A>MF&>C7?' >C<' I 7&' > = ' CF4@3CV' 4@7' = FA7' = 7&>-' = FA6@F?7<' >> ' # & ' % + I ' B > C 2 ' FA7' A7B7C4' Q7A7' 4@7' UA34>C?' MU4' CF4@3CV' 4@7' &7??' <>CV7AFU?' % ' , ' & 4@7' QFA?7' FA' Q@>4' 34' @>C' UC<7AVFC7 ' > ' * ' & '3C' L>A3FU?' U??7 ' ' . ' % ' , ')' *+Z ' ' ' @ ') ' 2 ' 3A' QFI ?' Q>?' ' CF4@ICV' &I 87' >' = >CCI ?' LF3??' 3C' ?FUC ') 7 6' ' ' ' * ! ' ? ' * G ' ' F4' F ' '4@>4' 7'' IB>BI 47' .>?' 3?' ?6F87C' F ' ' CFA' CF4@3CV' &387 ') 7 / ;' & '4A ' %% ' (' * $ $ ' * M ' F4' ?F' = UB@' BA7<3&' 4F' M7' V3L7C' UC4F' 4@7 = ' CF4@3CV' &387 ' >?' 4F' 4@7' ?BA364UA7 ' ! ' N ' $ ' F ' C% $ % ' ' 333' P @7' ?34?' @7A' @FA?7R' CF4@3CV' &387 ' ?F' Q7&&' >?' I FU' U??7<' 4F' <F ' + ' \ +)%' ' +' F4@3CV' &387 ' ?F' 7KB7&&7C4' >?' I FUA' 763VA>=] = >43B' 4A>C?&>43FC ' + > ' $ ' ;K 35 ' % (' UA' 'AF?4 ?77 = ?' 4F' @>L7' M77C' CF4@3CV' &387 ' ?F' ?7L7A7' >?' 34' @>?' M77C' 3C' ! A>CB7' FA' 4>&I M ' * ' ' ' % ' ' ' 2 ' 0 ' R ' 4A ' F + % 55 * (' ' * ' ' ;%) 5' 3 ' 'M ' FUA' BFUA47FU?' VFF<' Q3&&' = 87&@' I FU' VF' M7 I FC<' 4@7' 4AU74@ ' Q@3B@' BF = = 74M' CF4@3CV' C77A7' 4F' 4@>4% (U ' ?6>87' F'' K) (' ; FU>I5' 5 & ' KL&33 3' F = = ' @7' 47AA7?4A3>&' B3437' F'' 7AU?>&7 = ' Q>?' CF4@3CV' C7A7' ?F' &>AV7 ' >* ' ' % % $ % ' ' @3?' Q>?' CF' VA7>4' ?4>47 ;CF4@3CV' C77A7' >>.' = >C?5 ' %*K ' C ' C ' 4A ' ' C * ' ! ' F% ! ' ' ' F7= ' ;% +5)' V' = UB&>C' 7A3FA' 4F' 4@7' F4@7A ' MU4' CF4@3CV' C7=A' ?F' &>AV7 ' %' K (' & ; ' 7M?47A5 ' @7' 3C ' &U7CB7' F'' A7>?FC' 3C' 6AF<UB3CV' FUA' 6>??3FC?' 3?' CF4@3CV' C7>A' ?F' 7K47C?3L7' >?' 3?' BF = = FC&I ' M7&37L7<

. / J ! , . 9 ! J ; (('E * ' ' * ' "# =(" : +&+ 7 - #' * ' 33' B$ aC' C' 3L' ' " U4' $' FF&7?' 4@3C87' 34' M' CF4@3CV' ?F' % *)' K ' @% * ' / ' * ' ?' 3'' 7 = FBA34U?@><@7C7FU4A>V4FU?' 3C<77<7/#' Q@F' Q>?' CF4@3CV' ?F' K) Q' ' F ' ' *(' -)%* %%% ' C' 4@7' ?6A3CV] 43 = 7' 34' M' CF4@3CV' ?F' % *') +>' C ' ' # ' F * ! ' : + ! $ ' 3' KK333 ' 6K' @7C' ?F = 7' A76&I 7<' @>4' 4@7' ?FU&7?' F'' = 7C' Q (7' 3 = = FA4>& @7 7 ' ?QFA7 '4@>4' @7' 4@FUV@4' 34' CF4@3CV' ?F' %* % < $' * $ * ' %) %' 3L ' 3L ' % ' F = 7' = >I ' 4@3C8' F'' >7& 4@>4 ?@7' Q>?' CF' M7447A' 4@>C' >' A>6>CC3CV' U??I ' "U4' CF4@3CV' ?F' % *+' 0 $ ' % 5' 3L ' 33' UA' ?FB3>&' = FCF] 4FC7' F ' '&7L7&' <>I ?' 3V@4' = >87' FUA' M7?<' 777 = ' M>C3?@ = 7C4# " U4' 34' Q>?' CF4@3CV' ?F * ' 'G * ' $ # ' =(7:&' * % 7A@' 6>A4&I ' >C' 3CL7A?3FC' F'' G * ' ' * 1 ' = ' -* 6' KK3L ' , ' @F' Q3&' 4@7C' A76AFU7' = 7' >?' >&I >A ' G?>I 7' = I ' QFA<7?' >A7' CF4@3CV7' QFA4@' Z % * < ' ' * $ % , ' KL333 ' , ' @F' 8CFQ74@' CF4' 4@>4' 4@3CV' 4F' M7' CF4@3CV' QFA4@ ' 4@>4' 3?' V3L7C' 'FA' CFUV@4Z' %) % ' 1 ' C& ' *-' $ % ' * ' >' 3C' C%6 ' C& ' 2 ' F' M7&B@' FA' MU&B@ ' ;*F = = 7C<74M' = >CC7A?' 4F' M7' M>?7' = 7' 4' 'FU&7 ' >C< CF4@3CV' QFA4@ ' %) +' 8 & ' % ' % ' 33 ' B >>*C' + ' U?4>A<' M ' CF4@3CV' QFA4@' UC&7??' 34' M347 ' % * * ' B ' % ' * $ / ' * ' F = 7' 3B@' 7C' FL7A-L>&U7<' 4@F [CF4@3CV' QFA4@ ' % ' ' ' % 6 0 ' +>' I 7M ' I ' 7L3&' Q>?' 4F' M7' &387 ' F7 4@7 ? 4@7' UC3L7A?>&' @U = FA3?4 ' Q@F'?@FU&<' = >87' >&&' 4@3CV?' CF4@3CV ? ' CF4@3CV' QFA4@ ' >' ?4FU4@' U&&' 67A?FC ' &&' &' ! ' &, : ' & ! ' ! ' # I%"#/ ' S F4@3>3VFU - ?3>C' I N&&O : ! I ' F[4@3&3V I ' % ' $' * ' I% "8 I(#'& %) ' $ ' & * / ' L33 ' KL ' @73A' 63A34U>&' >4UA7?' QFU&<' M7' - CF4@3CV-<' YU347 ' %) + ' $ ' 4A ' * ' - ' @* 3% ' I ' ' (' [M' <' ?>7=7C4# ; ><>=5' 4&?' >C' @U = 3&3>43FC# [3?' ?UB@' >' 6AF<3V3FU?' -CF4@3CV3CV' F'' IFUA' ??4' 7 ' % ' ' G ' %*' >C ' (0 ' @U?' ''>E>AF' ''M7BF = 7?' 4@7' '3A?4' (3@3&3?4[FA' I - F4@3CVM4' [')'3SG ' 3C' C %)&G ' % ' >C ' ;% ,5 %%% 4' M ' >' <3?BFC43CU3CV' 433' <7?B7C4' >C<' >' -CF4@3CV3?3CV' F'' 4@7' '7 = >87' ' ' # ' ' ' 7B ' ' @>L7' CF4@3CV' 7&?7' 7KB76 4' = I ' -CF4@3CV&I??' ?7 4'' 4F' 4>&8' >MFU4 ' K 9)' ' ') ' % ' ' ' ,* ' @7' ?F&>A'?I ?47 = ' QFU&<' ?3C8' 3C4F' >' CF4@3CV.' &7??' A7&>43FC' 4F' U?' % K+' (# ' J %*' ! ' ' L ' @>4' -CF4@3CV&I ' A74FC ' @>?' C7>A&I ' ?@AUVV7<' @M' ?@FU&<7A?' FU4' F ''HF3C4 ' - ' *G' * ' ' && ' % ' FQ' L>3C ' @FQ' CF4M3CV&I ' ' 4@7' VAF>C3CV' >C<' ?4AU443CV ' >C<' 4@7' AU4@ ' >C<' 4@7' 3A4U7' F'' 4@7' QFA&<' % % ' 8 6 ' % ! ' 3 ' ;7<' 5 ' 3 ' * ' UM&3 = 7' <M (L7A37?' Q34@' >M?4AU?7' ?B37CB7?' F'' 3C?7B4.F&FVI ' = 447.F&FVI ' >C<' -CF4@3CV.' F&FVI ' % % ' / ' @+6)' , $ ' ' ' @>4' C7Q' 6AF?] 67B4?' >A3?7' 'FA' >L7C4UA7A?' 3C' CF4@3CVF FVI ' %* % 3C' >AA' B 2 C ' ' FU' >A7> >AFU?3>C >C< = I B&7AVI' >A7' - F4@3CVFU?3>C?' 'FA' 4@7I' @>L7' CF' CF3FC' >4' &&' >MFU4' 4@7' = >447A ' K FK' ! ' 4 & # % ' B' * ' >' 4' QFU&<' M7' L7AI ' ?4A>CV7' 3''?UB@' -CF4@3CVI ' = 7C' Q7A7' 4F' ?4>C<' 3C' 4@7' Q>I ' F'' ?F' VA7>4' >' = 7>?UA7 ' % +' < $' ;% * 5 ' KK33 ' >A&3 > = 7C4' @><' F67C7<' 4@7' <>I ' M7' FA7 ' Q34@' >' &FCV' CF4@3CV' I ' ;' QFA<' ' @>L7' BF3C7<5 ?677B@' 'AF = '4@7' 4@AFC7 ? !%" """ / (? " ("" ' 6' (#, ' % ' Z$' 9 " ' 6 ' #& * % ' % 7, +# ' &7" /" #' .&7"&$')69>4 $ * ' 2 >' J ' ' & CU = M7A' F'' 4@7' 67F6&7' Q (>A7 ' >?' 4F' A7&3V3FC ' F4@3CV] >A3>C?' ' . ' 4 ' 3&@' ' = ' % $ * + ' * ' B C ' @3?' BF = 6A3?7? ' = F?4' F'' 4@7' ' >643?4?' >C<' 74@F<M4?' >C<' >&&' 4@7'

F''CF4@3CV')9*)' # ' % ' '%'3' @7'3= = 7>?UA>M&7' B3ABU= > = M37C¢4' A7>&= ' F'' F4@3CVC7??' >C<' 3V@4\' ?))') ' * V\' % ' %''&I ', % 7'?77?' = >C' ?U?67C<7<' M74Q77C' 4@7' 4QF>M1???7 F''3C@C34I'>C<'CF4@3CVC7??' * & ' ' >A ' 4?' ?F4?' <FV=>' 3?' 4@7' 3C'3C34I' F'' F4@3CVC7?? . %&' # ,"!" # $' .&"#/' # #F&9"+!&#! F = = FC' 3C' % 4@'B7C4 ' 7?6 '3C' 6@A>??7' ' '& % ! '74B _ ' *'' * ')9;+' ' ?)& 6 ' L33 ' K33@' ;% + 5' ++ ' >B@' @>?' A74UAC7<'4F'34?'6A3= 7L>$' CF4@3CVC7??' K (' = . ' ' ' >C<' 7A'3 'K ' 4' = U?4 M7' <FC7' M I' 1 >34C ' Q@F??' AF<' <36' 7CB@>C4?' 4@7 = ' 3C4F'4@73A' C>43L7' CF4@3CVC7??' >C<' 4@7C' 34' 3?' M&7???<' , 9+-' C ~-' %' ! ' *% $ ' ' ' FQ' M7>U43'U&' 6&>C?' <F' '><7' 3C4F'CF4@3CVC7?? &++(!" # $' #+'" :+#&++' $7"$&' ?9>*' # ' F %*+ '333 ' @7' '3A?4' '<>I'F''CF4@3CVC7??' + +>O' ' *' + %,' ' 764 ' ?FA4' F''VA7 I'V3<<3C7??' '3A?4 '4@7C' CF4@3CVC7??' + + ' #' * % '2& ' '+ ' @7 I' 4@7 = ?7&L7?' Q7A7' Q7>C7<' 7>B@' FC7 7L7C' 'AF = ' 4@7' 4@3A?4' ''<7>4@ ' >C<' CF4@3CVC7??' >C<' A??4 @' %&' * !%?&++#&++' '=(#"!)' -+ 8&!%"#/ %)+)' ' ' * $ $ ' ' % '" I'4@7''FF ?@C7??7 4@>4' 3?' MI' 4@7' F4@3CVC7??7 'F'' A7>B@3CV' @7?? >L7?' 4@7 = ' 4@>4' M7&77L7' %) ' '3 ' B-' % . ' ! ' 3' % ' @ I' ?@FU&<' > ' >C' &FF8'>'47A'>CF4@7A?' 3V@47FU>C7??' 43&&' @7' ??7' 4@7' CF4@3CVC7??' F'' @3?' FQCZ' * ' ! ' F% F '), + 0 ' 7C?3M&7 ' F'' 4@7' F4@3CVC7 ??' F'' 4@3?' F4&<'>C< 4@7' >C34 I' F'' 34?' A>C<7UA?' ' ' + $ / ' ' '33 ' %+' UC7 ' ' ?>A= 7C4' U6FC' 4@7' CF4@3CVC7??' F'' VFF<' QFA8? Q>?' 6A7>B@7<' % ,>' # ' , + %'' L33' L3 ' U?4' ' A7?4A>3C' = 7 ' 4@AFUV@' 4@7' '7>A' F''?4A3'7 ' ! AF3@' MF&<3CV'U6' 4@7' CF4@3CVC7??' F''&3'7Z' %)*' (! ' @ * '2L ! ' UB' @3B@' '3A?4' B>&A7<' = 7>?' >447C43FC' 4F' 4@7' CF4@3CVC7??' F'' 8CFQ&7<V7' + ' '' ' 0 #' 3C' *+ $ / ' ' !7M ', *' @3?' ??& 7CUCB3>43FC ' 'FUC<7<' 34?7&'' U6FC' 4@7' L>C34 I'>C<' CF4@3CVC7??' F''Q@>4 Q>?' V3L7C' U6 . ' %(!' *%"'%(+# '=(7:& ' !%&' '&8 ,"!" # $.&"#/ * !%7&++ %) +' 1 :' ** * $ %' , % 'Q@F&7' 3B43FC>A I' Q@7A7] F''QFU&<' @F&<' 'FA4@'MU4' U7MC7???'F'' F4@3CVC7???' *%*+(' 1 " ' ;% 5 *)' I' 'CFQ' ' ' / + ' %' F'' 6 ' ?9 ' ' @)-* * $ ' 3L ' 7A7' MU?4&3CV' CF4@3CVC7??' Q@7A7' 4@7' FU4 3?' CF4' > ' * % ' $ %';% **5 'L3 ' +' @7' 6F&343B>4 BFC] L7A?>43FC' M74Q77C' 4@7' MFF47<' E>A' >C<' 4@7 = ' 7C' F''7>B7 Q>?' ?@77A' CF4@3CVC7??' + 'F' - ' '6 * ' ' +' @>4' >' BFC' 7???FC' F ''3C47AC>4' CF4@3CVC7?? !I& ' '#+'/#'$"' (#'& ' :#"8 !(#'& %' 6R@' ') 3K' (% ,%5 +% ' A3U = 6@3CV' 3C' CF4@3CV' = FA7'4@>C'3C' @3?' FQC'3S$4@3CVC7??' >C<'3C' 4@7' >4&C7?? F''4@7' 3L3C34 I' %'%)*,' #'-B ! '- ';%)* 5 %+,' @7' CF4@3CVC7??' F''4@7' A7>4UA7' 6A7L>3&3CV' 3C'4@7' >M?7CBH' F''4@7' 3L3C7' M7>= ?' 2' '5 '4A' *7 ! '? $ / B' * ' '+' KK33 ' %' BB76 4@FQ7L7&'4@7' >BA3'3B7' F'' = I' U = 3&34 I ' = I' FL7A4 I ' >C<' = I' F4@3CVC7??' %*+ ' 0 3 ' ' + ' ' -'@%/ ' B 2 C %' @7' ?UC8' <FQC' 4F' 4@7' B7C4A7' F'' @7A'FQC' CF4@3CVC7??' + +4 ' 0 ' ' : ' $' % 7C47A7<' 4@7' ! >BU&4 I' F'' <LFB>47?#' >C<' Q34@' >' '77&3CV' F'' CF4@3CVC7??' 6>B7<' 4@7' U47A' FU?7' % *+' # ' &' % ,' -' F) ' ;K F 5 ' 3 ' ' >CI @>L7' 'FUC<' >' <776' 67>B7' 3C' 4@7' ??C7?' F''4@73A' FQC' CF4@3CVC7?? ;' ' '# #F&9"+!&#!' !%"#/' (+!(!& $"# #F&9"+!&#'& ' * !%7&++#&++' (' !%"#/' $# '=(7:& ' &' %) ' ' '

4))' 4 ' < : ' J ' (' %+ ',# H B > C ' @7.&FF87<' ?F = UB@' M7447A' 4@>4' 3A' @>A&7?' CF43B7<' 34' 4F' ><H3# >A3734 ' ' !(B&' # !"'&' $ '! ' .+& =&' & '&"=&' 7+ ' %! * ' N'$' 9 ' &) =' . I 1> >' $ ' % ' 7B ==\ =' "7'34' 6A7L3FU?&I'CF43B7<' 4@>4' 4@3?' FM?7AL>43FC' 3?' FC&I '>66&3B>M&7' 4F' >' '>&?7' 4>?47' 3C' MU3&<-' 3CV ' %*) ' @ ' ' , ') ' ;% 5 (' 0' 4@7 @FU?7 >C<' <3<' CF4' CF43B7' >CI'F''4@7'>MFL7' B3ABU=?4>CB7?')69)' $ " ' % , ' -,$ @7'QA74B@'4@>4'QFA8?' >C<' Q776?' Q34@FU4' A7&37' ' >?' FC7' 4@>4' CF43B7?' @3?' ?3&7C4' VA37' ' 3 3 ' #' * % 'B' ' ' ' FA' CF43B7<' ' Q@7A7'#F I FU?&I' >47' = I' 4QF' I FUCV7A' M> 9' >4' 6&>I ' 3) ' # ' F %) ' KKL3U' , *9$' BFU&<' CF43B7' >' 4UAM&<#4 I' V>4@7A3CV('3C' 4@7' >3A' % +' J * $ % '' % ' * $ '$$' + *' F43B7' >' &>434U<3C>&' BA7>77' 3C' 4@7' &7'4' ?&77L7 %6 * ' % (' 6+ ' , ' ! ' ' , ' '4@3A<' PB@3&<R' '<3<' CF4' CF43B7' ['FA' ?F = ?' Q778?' ' ''FUA4@' 1<3<' CF4' CF43B7' >4' 4@7' 43 = 7' F''@7><.A74A>B43FC ' ! &(!' N(' & + #I' *"!%' + 8&' ,&/ &&' $' (!!&#!" #' $(= : ' ' 7"!&##&++;' ! ' &' /#"D&' ' ('B# *7&, /&' N #&I %*+)' ' 1 " ' \ ' ;% %5 ' ,+' @7' 7C743>C' > =] M>???<A7??' '3?' 4@7' FC&I' QF = >C' @7' @>?' I 7 4' CF43B7<' ' ' ' ' B' F ' ' B' ;%)+5 ' % ' ' Q>?' = UB@' M&3V <' 4F' 4@7 = ' 'FA' 4@73A' VFF<' Q3?@7?' >C<' 63C3FC# 3C' ?@FA4' CF' 7A?FC' BFU&<' 6F???M&I' M7' = FA7' F43B[<' 4@>C' = I?7&' ' %') 9)6 C ' & '@ +% *''3' A' &&3F4' @>C' ?@FQC' @3 = ??&">?' UC?F43B&4FU?' F '' M73CV' &FCV7A' CF43B7<' MI' 4@7' '>= 3&I ') 976 4 ' < ' % ' *) ' 2*' '' U4' F''BFU43?' = I' <7>A ' I FU' <3<' CF4' ' *) '?UB@' 67F6&7'Z ' ! ' # !"$)' N #&I' *-'>' !%"#/' 6 ' % ')667' & & ' ' 6>A8?' * ' $ ' -' B C ' @74@7A' 4@7??' >A7' 4@7'?>= 7'?@3&?' I FUA' KB7&7CB I' CF43B7<' U?' F' ' A7 = >3C?' UCB7A4>3C M ' F' ?7AL7' Q 34@' >' CF43B7#' 4F' V3L7' CF43B7' 4F ' ' % . ' % ' ')%%' @7' Q3<FQ' Q>?' A7VU&>A&I' CF43B7<' 4F' YU34' >4' 4@7' 7C?U3CV' 47A = ')9/*' ' @' ' 3' C' 4@7??' '37&<?' A' F2(QA>4@' 7K67C<7<' ?F = 7' = FC7L' >C<' Q@7C' CF43B7<' 4F' V3L7' 4@7 = ' U6 ' 7K6A???7<' @3 = ??&' 47AA3M&I' >VVA37L7<' + ' % ,' G ' % ' 7B' 0 ' @7' = 7C' >MFU4' FA4' 3C' CU = M7A' Q7A7' :CF43B7<[FC' ! A3<>I 6 ' 8 ' !(B&' N #&+&7$I' * + ' * -' + 8&!%"#/' .)' /"='#/' !%&' &O :"+"!&' # !"' & K K' " 3C' % ' G ',+' >A ',0%' @7' B&>U??'F' '4@7' B4' F'' % * 'Q@3B@' V>L7' Q7A' 4F' &>C<&FA<?' >C<' 47C>C4?' 4F' 'CF43B7' :4@7 = ??&LT?' FU4' F''34 &#'&' 1 2I"' """$$HHH ' ! ' .+& =(#!' * ", &' (* (B& % (' # ' @ % ' (' @ >' ';% 5 %% ' ' MA3?8. 7 I7<' & 6'$ ' ' # & !"' & (. "27"!) ' Z$' #&9!'F I' % (!' * %"' '%' "+' # !"' &(. 7& K (' @ % ' % ' >AU' %%,' @7??' &3447' CF43B7>M3&3437?' >A7'HU ?4' Q@>4' = >C83C<' @>?' 4F' ?U'' 7A' UC<7A !"' & (. 7&' N#F-E!"+(. E7I ' % ' Z$' 9 ' 3 I > ' !%)' ' ,&+& ="#/' $"# !"' & %*)' 4 ' F * ' ' ' >CI' P4A77?'R' 6AFM>M&I 7YU>&&I' CF43B7>M&7' Q34@' 4@F??' 7CU = 7A>4 7<' 3S)% 1 $ ' % ' % ' * $ * 0 ' % ' ' ! * ') ' L ' CF43B7>M&7' >C' Q34@' &>AV7' VA7I' 7I7?' C<' >' 6>&7' >B7')9*9' & # ' 2% ,5 ' * ' @7' BFCB&U<3CV' B&>U?7' 3?' CF43B7>M&7 ' ( )969' < ' 3C' ' * (' @* $ ' , ' 4' @>?' M77C' = I' >3 = ' 4F' A7V3?47A' 7L7A I' CF43B7>M&7' QFA< 4 ' (. 7&' $' .&'#/' # !"' &, ' .+& =&, % + ' O # ' %3 * ' 'L333' 3L' A>B7?' F'' >' BFC?434U43FC>&' &FL7' F'' ?@FQ Q 7A7' CF43B7>M&7#' MU4' FC7' MI' FC7' 4@7I' <3?] > 667>A7<') ' # * ' ! ' ' :' % ' ?&3V@4' 7K47C?3FC' F'' 4@73A' 3 = >V7?' U6FC' 4@7' A743C>' M7BF = 7?' CF43B7] >M&7 ' / ' s ' C' * ' $ ' ' ' 4' 3?' 3C' 4@7' BFUC4AI' 4@>4' 4@3?' Q>?47' jJ ?' = F?4 ?FAAF (U&&I' CF43B7>M&7 # '!"' & (. 7) ' %! ' -' &' 'h'F >'4 \' "#' (' # !"' &(. 7& 8 (##& ' ,&/ && & 8 (B. (. 7) K 9 ' ' ' B / ' >4R6' ' ' ')*' FF<' 3A"&>3?7-9' MAFQ'3?' @3V@' C<'CF43B7>M&I'C>AAFQ' % *+' ' ' ' '@* ' >')' ?7CT4CB7 ?F'BFC?4AUB47<' >?' 4F' M7' CF43B7>M&I'&FF?7 ?!"' &F. (, ' Z$' 9 ' \' ' . (, '.&("#/' (' # !"' &' ' #' *%"'%' # !"' &+' (&' ' 8? 8 #7)'$'9&, R' $ # ' % ! ' '43 ' L333' @7 I' Q3&&' M7' 6UC3?@7<' Q34@' 4@7' U4 = F?4' A3VF&' F''4@7' &>Q?' >?' CF43B7.MF>A<?' FM?7AL7 ' % (+' 4 S 3 '' @ % ' +) ' , ' F43B7' MF>A<? B>CCF4' M7' 4FF' ?3 = 6&7 ' /) % * ',)' >A'+% 0% 7 Q7A7' BFC'AFC47<' MI'>' CF43B7. M (<' 4@A7>4?C3CV' L7CV7>CB7' FC' 4A7?6>???A? ! ' ' Z$' ' []\ #&' * % ' !%(!' * %"'%' /"=&+' # !"' &' '"#!" 8 (!" # %* %' 1 - ' @ * (' J ' ' ' F' 3>4' 4@7' ?4>43FC' F''>' 6AF'???FA' 4?' FC&I'>'83C<' F'' &7 ,(&' F43B7A' 4F' 3C' FA=' C?' Q@7A7' 4@7'?@>447A7<' MU&8' F'' ?>= = V' &3?7' >4'>CB@FA ! " &F!(B& ' - !(B" # /\ +&@ 9 ' 6' 2 2!"$"(. 7&' (' Z$' 9 ' \F ' "& I' %(!' +% :7,' .&' # !"$"&,' ! ' + 8&(:!% "!) K (' %') ' ') 0,' 3??>??' <3'' 7A7C43>47<' 3C4F' CF43'3] >M&7' >C<' CFC.CF43'>M&7' % ' J $ ' F%B' K3' B4' ,0 ' 476?' >A7' M73CV' 4>87C 4F' = >87' BFC?U = 643FC' >' CF43'3>M&7' <3??>?? ! ' ! "$"' (!& ' ' 6 ' % ' Z &&'#&9!' (#,' F \' * ' ' ,&# !& X' ' *) &' 4F' ' VFF<' <3L3??FC' ?@FU&<' M7' BF=\ =F<3FU?' >C<' >64' 4F' CF43'3B>47' 4@7' Q@F&7 !"$"' (!" #' N#Q:Y!"$"B-EQ(#I' &?F'+' .>F3FUC' c>' ! ' ' * -)% * ' ; % .% ; !% * ' -)%5 $ B 6 '0% * '4' FA' >< ' = 7< ' ' ! -)! ! 'B $B' -' ' * -)% 'Z +&& 2 ' <>C<' < ' %&' (' !" # $'# !"$)"#/' 8 (B"#/'B# * #' (# "#!" 8 (!" #' (' # !"' &)'O PR' # ' C* & ' L ' = 74 ' 3 ';%) 5 % ' F' BCFQBC' R$CB7 CF43@B>B3FUC?' P ' ' * % =R$>4 M7C' I @3<<' LC<3A' HX' BFU7A.' 4FU3?' ?F $7' * '] '@ % ' ' % 0%' 34@3C @>&' ' I7A7'>'47A' CF43'3B>43FC' 4F' @ I = '4@7AF '' 4F' M7' = (7 ' , +) ' ' ' , ' ' + ' @7' ? > (' BFC?4>M&7' ?@>&' = >87' A7&>B3FC' >C<' CF43'3B>43FC' 4@7AF '' 4F' 4@7' S3CV7?' = >3?7437 ') ' $ ' L '+)' @7' >' = ?' F'' F<' 3?'4@7' F43'3B>] 43FC' F'' F<' ,)) ' + ' $ >' /) ' +' I FUA' FA' I 3L7' FAB@7? '7&7L>47<' FA' <76A7??7<' FU4' F''4@7CI' A<7A '= >I' MI' >VA77 = 7C4' V3L7' VA7>4' L>A3741' F'' F43'3B>43FC?' ' ,*+ ' ' 1 ' >' ;% +)5' $$' , ,+' @3?' ??7 = ?' 4F' @>L7' 4(7C' >' L7AI' UCC7B7?' ?>AI' CF43'3B>43FC ' %* %' # ' & ' --' 8?' 'KF' @7' ??BFC<' CF43'3B>43FC' Q>?' 4@>4' F''4@7' 83C< ?' >BB764>CB7' ?' >AI' CF43'3B>43FC' %* %' # ' & ' --' UAQ ' / ' ;% *5 ' '%+ ' ' @>L7' CF4 ??7C' >CI' F''3B3>&' CF43'3B>43FC' F''4@3?' >66F3C4 = 7C4 ' : K))' (' C % ' & ' '3K' %* ' ' CF43'3B>43FC' Q>?' 6UM&3?@7<' H (A43>&&I' ?U?67C<3CV' B>?@' k6>I = 7C4?' % *%' # ' $ ' %G ' ' 73I A>A7&I' CF43] '3B>43FC?' 3C' 4@7' 'FA = ' F'' BF = = >C<?' >A7' 3??U7<' MI' 4@7' AU&7A?' F''>' 6F&343B>&' ?FB374I 4' %&' ('!" # $!(B"#/' # !"' &' 6 ' % bBB' %) '3C' C + ' <' (' 8% B' ;% , 5 ' ' >447A' F'' 4@>4' BFC?7YU7CB7 ' 4@>4' 34' FUV@4' CF4' 4F' M7' 6>???<' MI' Q34@FU4' I FUA' CF43'3B>43FC ! ' !"$"' (!"=& ' (' 6 ' % ' ! (' % 0' -)% -' E =' &#"/#(7"=& %) ' ' ' ' ' ! ' %66% ' ;%))5 ' @7' ??7L7C4@ ' M73CV' CF43'3B>43L7' F''>' 6>A43BU&>A'<>I 2!"$"& ' Z$' #&9!'h'F 7' -' ' * B + (H #&' *% ' ' !%(!' *%"'% # !"' &+ %* ' '1 ' ->' -'@ ')' ;%*) 5 ' ')' @7' @UAB@' '3?>'6UM&3B877H(A>C<CF43'37AF'4@7'4AU4@' *+ ' ' @ ') * B * ' 3L' :' '%+ ' ?' 3'' 4@7I' PH(N' QFA<?R' Q7A7' C>4UA>&' C7B7? >(' 3VC?' F'' <7>?' FA' F43'37A?' F'' @3CV?' ' %) ' ' UC7' %) +0K @74@7A' 4@7' B>??' CF43'37<' FBBUAA7<' 3C' 4@7' BFUA??' F'' 4C7' CF43'37A[?' 6A3L>47' 6A>B43B7' ! "$) ' N#-2!"$ "I ' ' 8+Y ;FV # !"$"&' N; FR' R' ;F-' # ! $"&' NRF6' F$) I ' RF6 # !)$"&' NR E- I ' 6F # !"$) ' ' [(#,' /' * -)% ' !' * -)% B (, ' ' * -)% B$' ! + ' B# *# \' -'>' % ' '!(B&# !& $' .+& =&' # !"' & ' 6 ' *+' ' * , + ' 33 ' % %7A<7 >' 4@3?' 4@>7' >B@3CV?' F'' I VAF = 747A?' FA' F43F = 747A?' FA' 4@F??' >B@3C7?' MI' Q@3B@' Q7' = 7>?UA7'4@7' F3?4UA7' F''4@7' 3A ' !"' & (. 7&' N#F-E!"+(. E7I ' % ' Z$' 9 ' 3 I > ' !%)' ' ,&+& ="#/' $"# !"' & %*)' 4 ' F * ' ' ' >CI' P4A77?'R' 6AFM>M&I 7YU>&&I' CF43B7>M&7' Q34@' 4@F??' 7CU = 7A>4 7<' 3S)% 1 $ ' % ' % ' * $ * 0 ' % ' ' ! * ') ' L ' CF43B7>M&7' >C' Q34@' &>AV7' VA7I' 7I7?' C<' >' 6>&7' >B7')9*9' & # ' 2% ,5 ' * ' @7' BFCB&U<3CV' B&>U?7' 3?' CF43B7>M&7 ' ( )969' < ' 3C' ' * (' @* $ ' , ' 4' @>?' M77C' = I' >3 = ' 4F' A7V3?47A' 7L7A I' CF43B7>M&7' QFA< 4 ' (. 7&' $' .&'#/' # !"' &, ' .+& =&, % + ' O # ' %3 * ' 'L333' 3L' A>B7?' F'' >' BFC?434U43FC>&' &FL7' F'' ?@FQ Q 7A7' CF43B7>M&7#' MU4' FC7' MI' FC7' 4@7I' <3?] > 667>A7<') ' # * ' ! ' ' :' % ' ?&3V@4' 7K47C?3FC' F'' 4@73A' 3 = >V7?' U6FC' 4@7' A743C>' M7BF = 7?' CF43B7] >M&7 ' / ' s ' C' * ' $ ' ' ' 4' 3?' 3C' 4@7' BFUC4AI' 4@>4' 4@3?' Q>?47' jJ ?' = F?4 ?FAAF (U&&I' CF43B7>M&7 # '!"' & (. 7) ' %! ' -' &' 'h'F >'4 \' "#' (' # !"' &(. 7& 8 (##& ' ,&/ && & 8 (B. (. 7) K 9 ' ' ' B / ' >4R6' ' ' ')*' FF<' 3A"&>3?7-9' MAFQ'3?' @3V@' C<'CF43B7>M&I'C>AAFQ' % *+' ' ' ' '@* ' >')' ?7CT4CB7 ?F'BFC?4AUB47<' >?' 4F' M7' CF43B7>M&I'&FF?7 ?!"' &F. (, ' Z$' 9 ' \' ' . (, '.&("#/' (' # !"' &' ' #' *%"'%' # !"' &+' (&' ' 8? 8 #7)'$'9&, R' $ # ' % ! ' '43 ' L333' @7 I' Q3&&' M7' 6UC3?@7<' Q34@' 4@7' U4 = F?4' A3VF&' F''4@7' &>Q?' >?' CF43B7.MF>A<?' FM?7AL7 ' % (+' 4 S 3 '' @ % ' +) ' , ' ' F43B7' MF>A<? B>CCF4' M7' 4FF' ?3 = 6&7 ' /) % * ',)' >A'+% 0% 7 Q7A7' BFC'AFC47<' MI'>' CF43B7. M (<' 4@A7>4?C3CV' L7CV7>CB7' FC' 4A7?6>???A? ! ' ' Z$' ' []\ #&' * % ' !%(!' * %"'%' /"=&+' # !"' &' '"#!" 8 (!" # %* %' 1 - ' @ * (' J ' ' ' F' 3>4' 4@7' ?4>43FC' F''>' 6AF'???FA' 4?' FC&I'>'83C<' F'' &7 ,(&' F43B7A' 4F' 3C' FA=' C?' Q@7A7' 4@7'?@>447A7<' MU&8' F'' ?>= = V' &3?7' >4'>CB@FA ! " &F!(B& ' - !(B" # /\ +&@ 9 ' 6' 2 2!"$"(. 7&' (' Z$' 9 ' \F ' "& I' %(!' +% :7,' .&' # !"$"&,' ! ' + 8&(:!% "!) K (' %') ' ') 0,' 3??>??' <3'' 7A7C43>47<' 3C4F' CF43'3] >M&7' >C<' CFC.CF43'>M&7' % ' J $ ' F%B' K3' B4' ,0 ' 476?' >A7' M73CV' 4>87C 4F' = >87' BFC?U = 643FC' >' CF43'3>M&7' <3??>?? ! ' ! "$"' (!& ' ' 6 ' % ' Z &&'#&9!' (#,' F \' * ' ' ,&# !& X' ' *) &' 4F' ' VFF<' <3L3??FC' ?@FU&<' M7' BF=\ =F<3FU?' >C<' >64' 4F' CF43'3B>47' 4@7' Q@F&7 !"$"' (!" #' N#Q:Y!"$"B-EQ(#I' &?F'+' .>F3FUC' c>' ! ' ' * -)%5 $ B 6 '0% * '4' FA' >< ' = 7< ' ' ! -)! ! 'B $B' -' ' * -)% 'Z +&& 2 ' <>C<' < ' %&' (' !" # $'# !"$)"#/' 8 (B"#/'B# * #' (# "#!" 8 (!" #' (' # !"' &)'O PR' # ' C* & ' L ' = 74 ' 3 ';%) 5 % ' F' BCFQBC' R$CB7 CF43@B>B3FUC?' P ' ' * % =R$>4 M7C' I @3<<' LC<3A' HX' BFU7A.' 4FU3?' ?F $7' * '] '@ % ' ' % 0%' 34@3C @>&' ' I7A7'>'47A' CF43'3B>43FC' 4F' @ I = '4@7AF '' 4F' M7' = (7 ' , +) ' ' ' , ' ' + ' @7' ? > (' BFC?4>M&7' ?@>&' = >87' A7&>B3FC' >C<' CF43'3B>43FC' 4@7AF '' 4F' 4@7' S3CV7?' = >3?7437 ') ' $ ' L '+)' @7' >' = ?' F'' F<' 3?'4@7' F43'3B>] 43FC' F'' F<' ,)) ' + ' $ >' /) ' +' I FUA' FA' I 3L7' FAB@7? '7&7L>47<' FA' <76A7??7<' FU4' F''4@7CI' A<7A '= >I' MI' >VA77 = 7C4' V3L7' VA7>4' L>A3741' F'' F43'3B>43FC?' ' ,*+ ' ' 1 ' >' ;% +)5' $$' , ,+' @3?' ??7 = ?' 4F' @>L7' 4(7C' >' L7AI' UCC7B7?' ?>AI' CF43'3B>43FC' Q>?' 4@>4' F''4@7' 83C< ?' >BB764>CB7' ?' >AI' CF43'3B>43FC' %* %' # ' & ' --' UAQ ' / ' ;% *5 ' '%+ ' ' @>L7' CF4 ??7C' >CI' F''3B3>&' CF43'3B>43FC' F''4@3?' >66F3C4 = 7C4 ' : K))' (' C % ' & ' '3K' %* ' ' CF43'3B>43FC' Q>?' 6UM&3?@7<' H (A43>&&I' ?U?67C<3CV' B>?@' k6>I = 7C4?' % *%' # ' $ ' %G ' ' 73I A>A7&I' CF43] '3B>43FC?' 3C' 4@7' 'FA = ' F'' BF = = >C<?' >A7' 3??U7<' MI' 4@7' AU&7A?' F''>' 6F&343B>&' ?FB374I 4' %&' ('!" # $!(B"#/' # !"' &' 6 ' % bBB' %) '3C' C + ' <' (' 8% B' ;% , 5 ' ' >447A' F'' 4@>4' BFC?7YU7CB7 ' 4@>4' 34' FUV@4' CF4' 4F' M7' 6>???<' MI' Q34@FU4' I FUA' CF43'3B>43FC ! ' !"$"' (!"=& ' (' 6 ' % ' ! (' % 0' -)% -' E =' &#"/#(7"=& %) ' ' ' ' ' ! ' %66% ' ;%))5 ' @7' ??7L7C4@ ' M73CV' CF43'3B>43L7' F''>' 6>A43BU&>A'<>I 2!"$"& ' Z$' #&9!'h'F 7' -' ' * B + (H #&' *% ' ' !%(!' *%"'% # !"' &+ %* ' '1 ' ->' -'@ ')' ;%*) 5 ' ')' @7' @UAB@' '3?>'6UM&3B877H(A>C<CF43'37AF'4@7'4AU4@' *+ ' ' @ ') * B * ' 3L' :' '%+ ' ?' 3'' 4@7I' PH(N' QFA<?R' Q7A7' C>4UA>&' C7B7? >(' 3VC?' F'' <7>?' FA' F43'37A?' F'' @3CV?' ' %) ' ' UC7' %) +0K @74@7A' 4@7' B>??' CF43'37<' FBBUAA7<' 3C' 4@7' BFUA??' F'' 4C7' CF43'37A[?' 6A3L>47' 6A>B43B7' ! "$) ' N#-2!"$ "I ' ' 8+Y ;FV # !"$"&' N; FR' R' ;F-' # ! $"&' NRF6' F$) I ' RF6 # !)$"&' NR E- I ' 6F # !"$) ' ' [(#,' /' * -)% ' !' * -)% B (, ' ' * -)% B$' ! + ' B# *# \' -'>' % ' '!(B&# !& $' .+& =&' # !"' & ' 6 ' *+' ' * , + ' 33 ' % %7A<7 >' 4@3?' 4@>7' >B@3CV?' F'' I VAF = 747A?' FA' F43F = 747A?' FA' 4@F??' >B@3C7?' MI' Q@3B@' Q7' = 7>?UA7'4@7' F3?4UA7' F''4@7' 3A ' !"' & (. 7&' N#F-E!"+(. E7I ' % ' Z$' 9 ' 3 I > ' !%)' ' ,&+& ="#/' $"# !"' & %*)' 4 ' F * ' ' ' >CI' P4A77?'R' 6AFM>M&I 7YU>&&I' CF43B7>M&7' Q34@' 4@F??' 7CU = 7A>4 7<' 3S)% 1 $ ' % ' % ' * $ * 0 ' % ' ' ! * ') ' L ' CF43B7>M&7' >C' Q34@' &>AV7' VA7I' 7I7?' C<' >' 6>&7' >B7')9*9' & # ' 2% ,5 ' * ' @7' BFCB&U<3CV' B&>U?7' 3?' CF43B7>M&7 ' ( )969' < ' 3C' ' * (' @* $ ' , ' 4' @>?' M77C' = I' >3 = ' 4F' A7V3?47A' 7L7A I' CF43B7>M&7' QFA< 4 ' (. 7&' $' .&'#/' # !"' &, ' .+& =&, % + ' O # ' %3 * ' 'L333' 3L' A>B7?' F'' >' BFC?434U43FC>&' &FL7' F'' ?@FQ Q 7A7' CF43B7>M&7#' MU4' FC7' MI' FC7' 4@7I' <3?] > 667>A7<') ' # * ' ! ' ' :' % ' ?&3V@4' 7K47C?3FC' F'' 4@73A' 3 = >V7?' U6FC' 4@7' A743C>' M7BF = 7?' CF43B7] >M&7 ' / ' s ' C' * ' $ ' ' ' 4' 3?' 3C' 4@7' BFUC4AI' 4@>4' 4@3?' Q>?47' jJ ?' = F?4 ?FAAF (U&&I' CF43B7>M&7 # '!"' & (. 7) ' %! ' -' &' 'h'F >'4 \' "#' (' # !"' &(. 7& 8 (##& ' ,&/ && & 8 (B. (. 7) K 9 ' ' ' B / ' >4R6' ' ' ')*' FF<' 3A"&>3?7-9' MAFQ'3?' @3V@' C<'CF43B7>M&I'C>AAFQ' % *+' ' ' ' '@* ' >')' ?7CT4CB7 ?F'BFC?4AUB47<' >?' 4F' M7' CF43B7>M&I'&FF?7 ?!"' &F. (, ' Z$' 9 ' \' ' . (, '.&("#/' (' # !"' &' ' #' *%"'%' # !"' &+' (&' ' 8? 8 #7)'$'9&, R' $ # ' % ! ' '43 ' L333' @7 I' Q3&&' M7' 6UC3?@7<' Q34@' 4@7' U4 = F?4' A3VF&' F''4@7' &>Q?' >?' CF43B7.MF>A<?' FM?7AL7 ' % (+' 4 S 3 '' @ % ' +) ' , ' ' F43B7' MF>A<? B>CCF4' M7' 4FF' ?3 = 6&7 ' /) % * ',)' >A'+% 0% 7 Q7A7' BFC'AFC47<' MI'>' CF43B7. M (<' 4@A7>4?C3CV' L7CV7>CB7' FC' 4A7?6>???A? ! ' ' Z$' ' []\ #&' * % ' !%(!' * %"'%' /"=&+' # !"' &' '"#!" 8 (!" # %* %' 1 - ' @ * (' J ' ' ' F' 3>4' 4@7' ?4>43FC' F''>' 6AF'???FA' 4?' FC&I'>'83C<' F'' &7 ,(&' F43B7A' 4F' 3C' FA=' C?' Q@7A7' 4@7'?@>447A7<' MU&8' F'' ?>= = V' &3?7' >4'>CB@FA ! " &F!(B& ' - !(B" # /\ +&@ 9 ' 6' 2 2!"$"(. 7&' (' Z$' 9 ' \F ' "& I' %(!' +% :7,' .&' # !"$"&,' ! ' + 8&(:!% "!) K (' %') ' ') 0,' 3??>??' <3'' 7A7C43>47<' 3C4F' CF43'3] >M&7' >C<' CFC.CF43'>M&7' % ' J $ ' F%B' K3' B4' ,0 ' 476?' >A7' M73CV' 4>87C 4F' = >87' BFC?U = 643FC' >' CF43'3>M&7' <3??>?? ! ' ! "$"' (!& ' ' 6 ' % ' Z &&'#&9!' (#,' F \' * ' ' ,&# !& X' ' *) &' 4F' ' VFF<' <3L3??FC' ?@FU&<' M7' BF=\ =F<3FU?' >C<' >64' 4F' CF43'3B>47' 4@7' Q@F&7 !"$"' (!" #' N#Q:Y!"$"B-EQ(#I' &?F'+' .>F3FUC' c>' ! ' ' * -)%5 $ B 6 '0% * '4' FA' >< ' = 7< ' ' ! -)! ! 'B $B' -' ' * -)% 'Z +&& 2 ' <>C<' < ' %&' (' !" # $'# !"$)"#/' 8 (B"#/'B# * #' (# "#!" 8 (!" #' (' # !"' &)'O PR' # ' C* & ' L ' = 74 ' 3 ';%) 5 % ' F' BCFQBC' R$CB7 CF43@B>B3FUC?' P ' ' * % =R$>4 M7C' I @3<<' LC<3A' HX' BFU7A.' 4FU3?' ?F $7' * '] '@ % ' ' % 0%' 34@3C @>&' ' I7A7'>'47A' CF43'3B>43FC' 4F' @ I = '4@7AF '' 4F' M7' = (7 ' , +) ' ' ' , ' ' + ' @7' ? > (' BFC?4>M&7' ?@>&' = >87' A7&>B3FC' >C<' CF43'3B>43FC' 4@7AF '' 4F' 4@7' S3CV7?' = >3?7437 ') ' $ ' L '+)' @7' >' = ?' F'' F<' 3?'4@7' F43'3B>] 43FC' F'' F<' ,)) ' + ' $ >' /) ' +' I FUA' FA' I 3L7' FAB@7? '7&7L>47<' FA' <76A7??7<' FU4' F''4@7CI' A<7A '= >I' MI' >VA77 = 7C4' V3L7' VA7>4' L>A3741' F'' F43'3B>43FC?' ' ,*+ ' ' 1 ' >' ;% +)5' $$' , ,+' @3?' ??7 = ?' 4F' @>L7' 4(7C' >' L7AI' UCC7B7?' ?>AI' CF43'3B>43FC' Q>?' 4@>4' F''4@7' 83C< ?' >BB764>CB7' ?' >AI' CF43'3B>43FC' %* %' # ' & ' --' UAQ ' / ' ;% *5 ' '%+ ' ' @>L7' CF4 ??7C' >CI' F''3B3>&' CF43'3B>43FC' F''4@3?' >66F3C4 = 7C4 ' : K))' (' C % ' & ' '3K' %* ' ' CF43'3B>43FC' Q>?' 6UM&3?@7<' H (A43>&&I' ?U?67C<3CV' B>?@' k6>I = 7C4?' % *%' # ' $ ' %G ' ' 73I A>A7&I' CF43] '3B>43FC?' 3C' 4@7' 'FA = ' F'' BF = = >C<?' >A7' 3??U7<' MI' 4@7' AU&7A?' F''>' 6F&343B>&' ?FB374I 4' %&' ('!" # $!(B"#/' # !"' &' 6 ' % bBB' %) '3C' C + ' <' (' 8% B' ;% , 5 ' ' >447A' F'' 4@>4' BFC?7YU7CB7 ' 4@>4' 34' FUV@4' CF4' 4F' M7' 6>???<' MI' Q34@FU4' I FUA' CF43'3B>43FC ! ' !"$"' (!"=& ' (' 6 ' % ' ! (' % 0' -)% -' E =' &#"/#(7"=& %) ' ' ' ' ' ! ' %66% ' ;%))5 ' @7' ??7L7C4@ ' M73CV' CF43'3B>43L7' F''>' 6>A43BU&>A'<>I 2!"$"& ' Z$' #&9!'h'F 7' -' ' * B + (H #&' *% ' ' !%(!' *%"'% # !"' &+ %* ' '1 ' ->' -'@ ')' ;%*) 5 ' ')' @7' @UAB@' '3?>'6UM&3B877H(A>C<CF43'37AF'4@7'4AU4@' *+ ' ' @ ') * B * ' 3L' :' '%+ ' ?' 3'' 4@7I' PH(N' QFA<?R' Q7A7' C>4UA>&' C7B7? >(' 3VC?' F'' <7>?' FA' F43'37A?' F'' @3CV?' ' %) ' ' UC7' %) +0K @74@7A' 4@7' B>??' CF43'37<' FBBUAA7<' 3C' 4@7' BFUA??' F'' 4C7' CF43'37A[?' 6A3L>47' 6A>B43B7' ! "$) ' N#-2!"$ "I ' ' 8+Y ;FV # !"$"&' N; FR' R' ;F-' # ! $"&' NRF6' F$) I ' RF6 # !)$"&' NR E- I ' 6F # !"$) ' ' [(#,' /' * -)% ' !' * -)% B (, ' ' * -)% B$' ! + ' B# *# \' -'>' % ' '!(B&# !& $' .+& =&' # !"' & ' 6 ' *+' ' * , + ' 33 ' % %7A<7 >' 4@3?' 4@>7' >B@3CV?' F'' I VAF = 747A?' FA' F43F = 747A?' FA' 4@F??' >B@3C7?' MI' Q@3B@' Q7' = 7>?UA7'4@7' F3?4UA7' F''4@7' 3A ' !"' & (. 7&' N#F-E!"+(. E7I ' % ' Z$' 9 ' 3 I > ' !%)' ' ,&+& ="#/' $"# !"' & %*)' 4 ' F * ' ' ' >CI' P4A77?'R' 6AFM>M&I 7YU>&&I' CF43B7>M&7' Q34@' 4@F??' 7CU = 7A>4 7<' 3S)% 1 $ ' % ' % ' * $ * 0 ' % ' ' ! * ') ' L ' CF43B7>M&7' >C' Q34@' &>AV7' VA7I' 7I7?' C<' >' 6>&7' >B7')9*9' & # ' 2% ,5 ' * ' @7' BFCB&U<3CV' B&>U?7' 3?' CF43B7>M&7 ' ( )969' < ' 3C' ' * (' @* $ ' , ' 4' @>?' M77C' = I' >3 = ' 4F' A7V3?47A' 7L7A I' CF43B7>M&7' QFA< 4 ' (. 7&' $' .&'#/' # !"' &, ' .+& =&, % + ' O # ' %3 * ' 'L333' 3L' A>B7?' F'' >' BFC?434U43FC>&' &FL7' F'' ?@FQ Q 7A7' CF43B7>M&7#' MU4' FC7' MI' FC7' 4@7I' <3?] > 667>A7<') ' # * ' ! ' ' :' % ' ?&3V@4' 7K47C?3FC' F'' 4@73A' 3 = >V7?' U6FC' 4@7' A743C>' M7BF = 7?' CF43B7] >M&7 ' / ' s ' C' * ' $ ' ' ' 4' 3?' 3C' 4@7' BFUC4AI' 4@>4' 4@3?' Q>?47' jJ ?' = F?4 ?FAAF (U&&I' CF43B7>M&7 # '!"' & (. 7) ' %! ' -' &' 'h'F >'4 \' "#' (' # !"' &(. 7& 8 (##& ' ,&/ && & 8 (B. (. 7) K 9 ' ' ' B / ' >4R6' ' ' ')*' FF<' 3A"&>3?7-9' MAFQ'3?' @3V@' C<'CF43B7>M&I'C>AAFQ' % *+' ' ' ' '@* ' >')' ?7CT4CB7 ?F'BFC?4AUB47<' >?' 4F' M7' CF43B7>M&I'&FF?7 ?!"' &F. (, ' Z$' 9 ' \' ' . (, '.&("#/' (' # !"' &' ' #' *%"'%' # !"' &+' (&' ' 8? 8 #7)'$'9&, R' $ # ' % ! ' '43 ' L333' @7 I' Q3&&' M7' 6UC3?@7<' Q34@' 4@7' U4 = F?4' A3VF&' F''4@7' &>Q?' >?' CF43B7.MF>A<?' FM?7AL7 ' % (+' 4 S 3 '' @ % ' +) ' , ' ' F43B7' MF>A<? B>CCF4' M7' 4FF' ?3 = 6&7 ' /) % * ',)' >A'+% 0% 7 Q7A7' BFC'AFC47<' MI'>' CF43B7. M (<' 4@A7>4?C3CV' L7CV7>CB7' FC' 4A7?6>???A? ! ' ' Z$' ' []\ #&' * % ' !%(!' * %"'%' /"=&+' # !"' &' '"#!" 8 (!" # %* %' 1 - ' @ * (' J ' ' ' F' 3>4' 4@7' ?4>43FC' F''>' 6AF'???FA' 4?' FC&I'>'83C<' F'' &7 ,(&' F43B7A' 4F' 3C' FA=' C?' Q@7A7' 4@7'?@>447A7<' MU&8' F'' ?>= = V' &3?7' >4'>CB@FA ! " &F!(B& ' - !(B" # /\ +&@ 9 ' 6' 2 2!"$"(. 7&' (' Z$' 9 ' \F ' "& I' %(!' +% :7,' .&' # !"$"&,' ! ' + 8&(:!% "!) K (' %') ' ') 0,' 3??>??' <3'' 7A7C43>47<' 3C4F' CF43'3] >M&7' >C<' CFC.CF43'>M&7' % ' J $ ' F%B' K3' B4' ,0 ' 476?' >A7' M73CV' 4>87C 4F' = >87' BFC?U = 643FC' >' CF43'3>M&7' <3??>?? ! ' ! "$"' (!& ' ' 6 ' % ' Z &&'#&9!' (#,' F \' * ' ' ,&# !& X' ' *) &' 4F' ' VFF<' <3L3??FC' ?@FU&<' M7' BF=\ =F<3FU?' >C<' >64' 4F' CF43'3B>47' 4@7'

'333 ' , , , ' 6>A4' F'' 677B@' ?UB@' >?. A>= = >A3>C?' B>&&
>' FQC ' %*- ' 1 ' *)'3 ' L3 ' :' ' 4' QFU&<' M7' L7A I' A3<3-'
BU&FU? 4F' <3L3<7' >' MFFB ' 3C4F' CFUC?' >C<' 6AFCFUC? ' %* +'
FQ ' *) ') '% ' F' CFUA3?@ = 7C4' 4F'' 77<' @3?' VAF Q3CV' = 3C< '
" U# BFC?UV>47<' L7AM?' >C<' CFUC?' <7B&3C <\' % ++' ' :'
% + B' % ' +% ' @3&<A7C' >C<' ?>L>V7?' U??' FC&I' CFUC?'
FA' C> = 7?' F'' 4@3CV?' Q@3B@' 4@7 I' BFCL7A4' 3C4F' L7AM?' % +'
0 = 1' % ' ' % ') ' @7' 6AFC7C7??' F'' CFUC?' Q@3B@' @><' >' ??= 3&>A'
47A = 3C>43FC
H . ' # (,0&'!"=&' 6 ' %
%) *' ' +! $ ' % ' F % $ ' ' FUC?' F'' 4@7'
F = 6>A>43L7' >C<' U67A&>43L7' <7VA77 ' 4CV' 6U4' 6>A43-'
&3L7&I ' A7YU3A7' >' 7C343L7' B>??'
' ' % 6' (#,' *$6
3 (3' ! ' @ * ' ' *' + ';% *5 ' &&' 4@7' QFA<?'
Q@3B@' Q7' ?@>&&' 3CB&U<7' 3C' 4@7' CFUC$VAFU6F' >A7' 777?C43>&&I'
6A7??C43L7 ' , * ' 1 #' - ' % ' L33 ' %, ' @7A7' >A7'
CFUC. ' FA = 3CV' 2U' ' 3K7?
4 ') * ' '# ?NL ' ' $ ' ! "
% $ ' @% ' % ' ' ; 7ABI' FB 5 ' , +' ' CFQC7' ?UM-'
?4>C4 I L7' 3V@4' ?4>C<' Q I4@FU4' @7&67' F''>C' ><H7B4 (7 ' %
' ' * ! ,+' FQC7?' ?UM?4>C43L7?' @>L7' 4@A7' B@7'7'
>BB3<7C47?' V7C<7A ' CF = MA7 ' >C<' 6>A?FC ' K)E>' #' ! '
' % ' ''4@7' B@3&<7' MU4' 8CFQ7' @3?' QFA<' 4F' M7' &38 7' >C I ' F''
4@7' 7K>=6&7?' F''>' FQC' UM? >C43U7 @7' 8CFQ74@' 34' 4F' M7'
>' FQC' UM?4>C43U7 ' E) (' 0 ' $ ' F**! G ' (')
3K' %* ' @7' FC7 @>&'7' F' 34 ' 4@7' FQC' UM?4>C43L7 ' %G ' 3?'
7K6A7? I' 3C' BA36 4UA7 ' %** ' ') ' 33 ' 33 ' FU'
@>L7' 4AF67 ' ' 3VUA7 ' >C<' = 74>6@FA ' >?' 6&7C4 I' >?' CFUC.?UM-'
?&>C43L7?' % >' 4 # ' * ' KK3 ' @7A7' 3?' CF'
4>&83CV' Q34@' CFUC' ?UM?4>C43L7?' FC&I ' % + ' @ *) ' @ * '
*) ' $) ' @7' 3C?434U4>FC' F'' CFUC?' ?UM?4>C43L7 ' QFU&<' 6AF]
M>M&I ' M7' FC7' F'' 4@7' '3A?4' ?476?' 4FQ>A<?' 4@7' ' FA = >43FC' F''
&>CVU>V7
- ' %* ' : ' @ 0) ' 3L ' ;%*, %5 ,% ' @7' 4AU7'
@UAB@' F'' CV&>C<' 3?' >' FUC. ?UM?4>C43L (' 4@>4' B>C' ?4>C<'
MI' 34' ?7&' ' %*+%' @* ' C % % ! ' ;3) 5 ' ,) *' F' ' MI' = I ?7&''
B>C' FUC' UM?4>C43L7' ?4>C<' = 6F?7' FC' = I' QC7A?' >C<'
?>L7' = I' FQC' >C<
' *+ ' ' % ! 8) ' 7+ '-
% ' ' ' ' *! ' E, & FQC7?' >< H7B43L7?' @>L7' ' 4@A7'
B@7=' >BB3<7C47?' V7C<A7' CF = MA7 ' >C<' BFC&6>A>43FC ' E)F '
' ' *' ! ' 8?' ; AF?>A45 ' % 0% ' >87<' >C<'
'77M&7' &3B7' >' CFQC7' >< 37B4U7' 4@>4' B>CCF4 ?4>C<' >&FC7' E) '
1 : ' % ' % %) ' ' 3 ' :*' @7' 4AU7' V7CU3C7' ?7C77' F''
>' FUC' <H7B43L7 '3 = 6FA4?' 4@3?' V7C7A>&' CF43FC ' F'' 7A4>3C]
3CV' 4F' X* ' : '@ 0) ' :%*, %5) ' @A3?A3>C'
FL7AC = 7C4' 3?' >' FUC. <H7B43L7 ' >C<' B>CCF4 ?4>C<' MI' 34'
?7&' ' Q34@FU4' ?UB@' <HU4>C4?' , *)' (& @+ /-+' L3 '
@>4' 3?' >C' <H7B43L7Z' ' <>A7' CF4' B>&&' 34' FUC' <H7B43L7 '
, *)' 5 #' @+6 ') ' % ' F % $ ' ;7<' ' %
6 ' >C<' *$6 ' %' E)>' ! ' < ' - ' ! ' , ' B C '
[@7' FQC.><H7B43L7.C>4UA7<' A3CB7?' >C<' ?U&I7B4?' F''4@3?'
43 = 7 ' 6 ! ' %)) ' @7' FUC7' >< H7B43L7' C>4UA7' F''4@3?' ?U67A]
?4343FU?' A3CB7???
&#'&?7" *""#+' ' 6B :+"#/* ,+ (+ # :#+'
:2#7&++ % ' %(=" #/ # ' # :# :E:47"" T
+!(!:+ (+ (' # :#' '*') 0G* !
-* * 4 < %% ' ' ' %') ' B2 > C '>'
7' 4F' 4@7' FUC3CV' >C<' 7AM3CV' Q@3B@' @7' ?F' @7>L3&I'
B@>AV7<' IFU' Q34@' ' C ' @* $ ' ' @7'
747AC>&'UC>=M3VUFU?' ?677B@' @7' CFUC&7??' L7AM&7??' 4FCVU7
% ' %$ ' % ' 6A' % 0,' @7' 6>A7C4' CFUC'
G 'Q@F?7' CFUC?M36' 3?' <7C37<' M' ?F=7' VA>= = >A3>C?'
B>C' FC&I' V7' 7 = 6&FI = 7C4' >?' >C' ><L7AM
: # (7 N#(:E#(7I' % ' Z$' &' ' H I' $!%&'
#(!: & 'O: (7"!)' $ ' (' # :#
, * ,' ! ' ' * ' + ' L33 ' ,)% @7C' L7AM?' >A7'
6A7??C43L7 ' 4@7 I' >A7' ?F' 6A7B3??&I ' 3C' 6AF6FA43FC' 4F' 4@7' >' = FUC4'
F ''CFUC>&'

A3?4 '>C<'CFA?35$' A3?4' Q35$3CC7'@3A ' %+ >' 4A ') %') B' @ '@ ' , *' @7V@' 4@7' MF<I' = >I' CF4' >&Q>I' 7C<UA7 ' @3 4' = >I'7C<UA7' 4FCV7' 4I = 7 ' I ' 4@7' 8 I C<7' F' F'' = >C' M7' 7 && I (CFAI?B@3< (' 3> >d F' 4A ' I '' ; F&&?5' $$$' + ' ! >U?4U&U?' 4F 8 7' 4@7' H' BC3&<7A' >Q7 I' 'AF = ' 4@>4' M7?47 ' CFAI?B@7CV7' 4M7 I = 7'3C' @3?' 'kFB87F''M'7?47?' Q34@'@7AM7? ' (7 ? ? ' >C<' ?UB@7' F4@7A' @3CV7?') ?*9' : #' ' %' I ' 3 ' 33 ')' @7' = U&4 I -' 4U<7' F''676U 6&7C4UFU?&I ' CUAI ?B@ I <' Q I 4@' >MUC<>CB7' F'' >&' 4@ I CV I ?' % (' 1 ' ' 4A ')) % , (' *, ' 4 ' KL333 ' ,K >&=' 4A77?# F''4@7 ' AU3# F'' Q@3B@' 4A7?? ' 4@7 ' = FA7' 6>4# F'' 4@7' 3C@>M34>C4?' ' >A7' CFUA3?@7<') /7)' % ' ' KK3L ' >4UA>&&' '' &FU< B3ABU&>43CV ' CFUA3?@74@' M I ' 4@7' Q>I ' 7L7A I ' 7 = M7A' F'' 4@7'' = F<I F'' >C ' % *' ! $ ') * B B ' ; '' F@C5 ' %* ' @7' @U = >C' MF<I'B>C' M7' CFUA3?@7<FC'>CI'' F (' 3 (K' 'S ' H* BB ' $ ' ? ' ! ' ;7< ' +5 * ' '73CV' @>4B@7<' 3C47AC>&&I ' 4@7' F'' ?6A3CV ' >A7' CFUA3?@7<' 3C' A7B764>B&7?' 6AFL3<7<' 'FA' 4@7' 6UA6F?7 : ')'%+ ' / * ' * ' 6>4' ?B@7' ?BMU&<' VAFQ7' 4F' H/ '73&' CFA3?B@3<' Q@I$ = 3A>B&3?' >?' Q7' Q>447A7C' 6&>C43?' 43&' @ (I ' M>C' M7C' AF43<' K9+ ' ; >A 5' C& ' * $ ' @ % , B' F&&7B&' * A3C34 I ' CBA7>27'' = ' U?' 4AU7' A7&3V3FC ' CFA3?@7' U?' Q34@' >&& VFF<C7?' E >F' ! ' * ' % / % ' C' @UC<A7<' 4A3M7?' CFUA3?@7<' FC' ?4A>CV7' A7&3V3FC?' C<' &>Q&7?? ?&>L7A3?') 9 - *' ' 3) *' '33 ' 7C' F ''UCM&7 = 3?@7<' 6UA34 I 'F'' &3'7' CFUA3?@7<' Q34@' 4@7' &7>AC3CV' F''4@7' B&F3?47A

A' ' +: 7)' N(!%'#/ I' *'!% *%(!&=&' '+ #&'&++( ) ' ! ' 8 !& "!+' / *!% ' $ 8(!" #' ' ! ' 8 ("#!("# "! # & ' * #, "!" #

R*9 ; ' 1 # % ' & ') ' ?' Q 747' ?F = 7A?' CUA3?@7C' ?3B@7' 4>A7?' M* ' 4 & ' 2 FKM 5' KL33 ' * ' 6>3' P<$>/' = FC<?5' 7A' CUA3?B>4' Q34@<7Q'F''M7U7C ' %+*%' " #' * $ /) ' ' ' 3C' ?@ = ' ;%) ,5'%)' 3C7A>&& 'M7' CUAA I ?@ I <' MI ' = I C I ?4A>B I F C ' ' F I ?4UA7' A><' B>&&' Q@ I B@' 4@7 I A' M7V I C. ' C I C V' Q>?' % +>' % ' K ' ;% * 5' , +' 4' <F4@' A73F I B7' >&&' 4@7' 6FQ7A?' F'' = >C ' >C<' <F4@' CFQA I ??@7' 4@7 = ' % B ' # ' 4 ' 33 ' 387' >' 'A7?@&I ' 6&>C47<' 4A77 ' @F?7' MA>UCB@7??' '>3&7' CF4' 4&=7&37' 'AU347' 4F' CFUA3?@ ' %) +' ' <D B 4A ' .)* % . ' ' ! ' %%%' KK3 ' % ' 7# 4@3?' = ?7<' 3?' QFC<7A' U&&' 6AF'34>M&7' 4F' MA3CV' 'FA4@' VA>??7 ' >C<' 4F' A>3??' # ' >C<' CFUA3?@' 4@7' ?77<7 ' _ //6 4 ' @ ' ' % ' 3A7 ' >C<' I7' &7 = 7C4? ' ' 4@>4 = 3K' C<' CFUA3?@' >&& 4@3CV?' ' *) ' . ') ' % ' @>4' 6&>C4?' >A7' >B4U>&&I ' CFUA3?@7<' MI ' 7 > A4@ # 4@>4' 4@7 I ' >A7' >&?F' CFUA3?@7<' MI ' Q>47A ' %* +' * % &') ' @A7>47C3CV'>&' FCB7' >C<' CFUA3?@>3CV' 4@76&>C) 9* -' 4 ' 4 & ') ' @7' ?' ! ' * @7I ')' > ' '@* $ 'B(' (C KKL3 ' * @>I ' Q>&<' = 7C' CLA73?4' >&&' 4@>3A' C73<3 ' 7A7' I Ui' ?4>C<' U6FC' 4@7' = FUC4>3C' ?&FB7?' Q@3B@' C F U A3 ('4@7' V&>B37A' P74B R ' < ' F * B $ %& ' ' V 3 ' * ') 7 2 * % ' 3 6 ' % % ' ' @7' ?83C?' ' >A7' 4@7C' 6U4' 3C4F' >' = 3K4UA7' F'' Q>47A ' ' &FUA ' I7&8' F'' 7VV?' >&U = ' >C<' ?>&4' / 4F' M7' $CFUA3?@7<' -] K (' @ % ' % 'F ' K)' >I ' +0%' '47A' 34' P4@7,83<.?83CR' @>?' M77C' UC@>3A7<' <A7???<' CFUA3?@7<' ?4>87<

6 =",& * "!%$ ' ' +:+!&#(#'&' ! ' 8("#[!('#' +: ! ' (' $' 7('&+

9 * ' . ' ; FKM 5' K33 ' ' 4' MA3CV7?' 'FA4@' C7' CUA3?B@7E' C>' YQ388' 4@3CV ' □ # (' 'C % ' '@ ' ' &3L ' + *' F = 7 ' <IB@7?' M7C' 'U&&' F'' Q>47A' >C<' 4@7A3C' ?' 'I??@7' CFUAI??MI<' >C<' QFA = 7?' F'' <IU7A?' 8 I C<7 ' ! # ' ' % ' ' 3 ' 33 ' *,' M7A' >?' M7'FA'4 I = 7' @>4@' MIC' CUAI?B@I<' = UB@' VU<' >C<' @AI?4I>C' 676U&' CFQ' I FU' ?B@>&' 'LC<' CF' 4@ I CV' = >I C4 7 I C I <' MU4' Q I &<>C<' MAU47' M7?4 I ?' ' 1 '4A ') * % , ' * , ' 'K33 ' +' ; @7' BFUC4A I R' CFUA3?@74@' G' 6>?4IUA74@' 3C' 4@7' L>&&7 I ' >' VA7>4' CU = M7A' F'' FK7C ' > *' ! 0 ' + ' ' % ' ' 4@7??' &37?' @AF = AF7' 'CFUA3?@7?' >' 67F6&7' 4A7>B@7AFU?' >C<' &7>?4' ?FB3] >M&7 ' > ' ' 'F * '34 ' ' UA' >C<3?' 'AF = '4@7' >V7' F'' I V7A?' 'A77<' FA' CFUA3?@7?' 4@7' I FCP?>CVA I ' 77< % ' -' □ ! ' ,$ ' ') ' KBL3 ' >4&7' * % ' ' % 4@7' =,3V@4 I ' F4@7A' = 3&<' FUA3?@7?' 3C' @7A' MF?F = ' $' & + #+

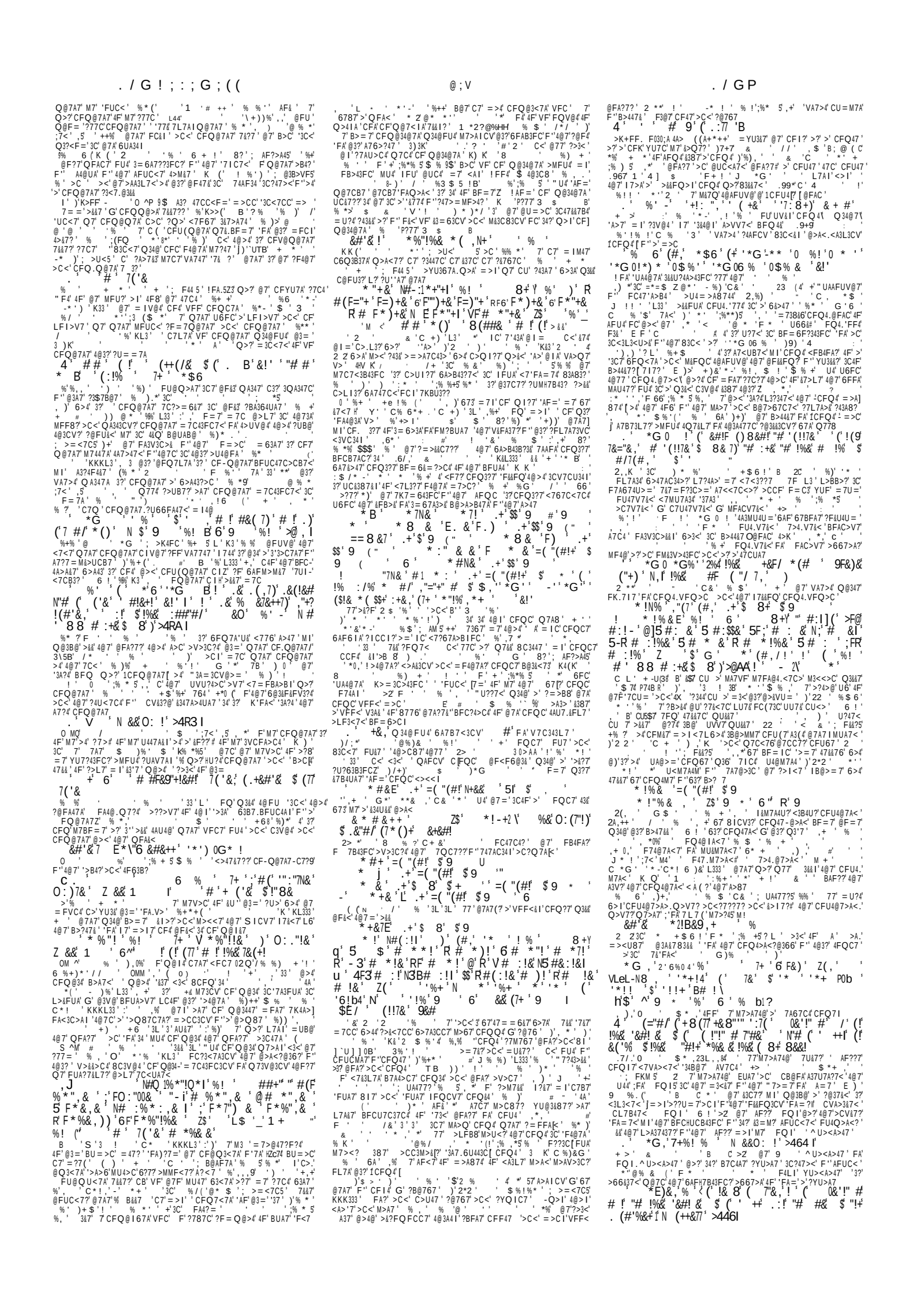
+ . '4A ' ! '' ; F&&?5 ' *' @7' ?73<7' 8 I CV7 Q>?' = FL7<7' 4F' &7L7' 4@>4' (4 7 ' >C<' 4F' CFA3?B@7' >' B ' 6FFA7' = 7C' 4@>4' <>I ') ' RAA' + ' ' KK3' FUC?7 I &&7' (7 ' 6FU7A7' Q I <FQ?7 ' CFUAI??@7' FA' <FF' 4F' MT' CFAI??@7<' 4@7' 6FU7A7' FA6@7C I C?' % % ' '4A ' F + % 55 * (' -' * G ' ;%) 5' % 'M' 34@' FC7' A4' FC7&I ' 'CFUA3?@' = I ' ?7&'7 ' = I ' Q3 ' 7' >C<' B@3&<A7C ' □ □' / ' F ' ' K&L ' KK' C<' 4@FU ' ?@>&4' <Q7&&' 3C' 4@7' &>C<' F'' F?@7C ' C<'4@7A7' Q3&' $ CFUA3?@' 4@77 ' : ' T RM ( ) ' ' %%' KL ' V = FC4' >C<' FAC' Q7A7' CFUA3?@[<' ?43&&' Q34@' @F67?' UC43&' @3&3&' '@>C<' 6A76>A[<' >C' >A = I ' % +*' A3C;# (A, ' ;7<' ,5L'+ ' 7'6UM83&I ' 6AF47B47<' >C<' CFUA3?@7<' 4@7' B@UAB@' 3C' " A3 > 3C

> ' %6 * ' ($$,'# : '+%8&#!' 6

+ ' % ' - % ') (' + ' ,% ' IZ' M7' MA>IC(' FA' 3C' FCI' 6&>B7' CI#' / ' @7A47 ' FA' CI ' FCI ' &I = 7' M>4' CFA3?B@74@' ,7-,' ! # ' % ' '3A' K4 ' , ' @7' VA7>447?4' &FU7?' <F' CFA3?@7' = F?47' '>?47 ' 'FA' >?' = UB@7' (' 4@7' I A7' @>4@' CF4' 7K@>U?47<' 4@7' = F3?4UA7' F'' 4@7 = ' % **' 0 6%) (' + 6 ' 333 ' ;%) 5 %+)' @7767?' 3&87' 3?' ?Q7747A ' >C<' CFUA3?@74@' = FA7 ' %) , ' ' ' ' ' ' %' : ' + ' ?' CUC7?' >C<' FF4?' CFUA3?@' = FA7 ' 4@>C' 4@7' 7>U7?') /Q6' 4 = ' @ ' ' , ' >L7' Q@>4' MI'' AUV>&' ?4FA3CV' '3A = C7??' V>3C?' F' CFUA3?@>C<' ?U67A,&UFU?' = F3?4' BFC?U = ?

!4 ' ' ' ' ' '

33F43A I??@ = 7C4' F '' @ 7A' M&7???<' MF<I ' ' '



H' *) ' .+' $ 8' N+&& ' 5f $' +
+ ' ,A ,' 'G' ' ';% 5' 74' @ I4' MFI&7'?F'4&I'
'@>&'7'>' CFQ!A
' ' ' N# 7!+IE Z-F\' "/%!' N %"&87)
OM P o' !(' / ' ^' L33H' ! FAV3CV' <F&7'U&&' 6&>3C4?'
4@>4' FK'@>4@'AUCC7'@7A' A>B7' %'O Q ' ! / * ' +'
>A8?F=7' FK'@><'?6A7><' >MFU4' 4F7'7>A4@' 7A'M&>B83?@'
=>C4&7' - 3F' '3C' % /'] '@ ' % 5' FK'
@><' ?6A7><' @3?' ?>M&7' ?>A8' QA7' 4@7' A7>&3FC' % ++'
' '3C' $ 'F%5';% %5 %,' UV ' &&' MFF8?'7L7A'
QA3447C' U6FC' @3= ' M7&FCV' 4F' 4@7' A7>&=' F '' FK'>C<' A7MU?'
'E" 1 9' FM?' $ 8' N+&& ' 5f $ 9
%'%+ . ' ' 3%' ! '+*++' ?'>' CFK' YU7C'@7'&>Q7?')'K+>F'
* ' ' *! ' % %,' UAA7' 4@FU 4 5$>4' >' CFK' Q7C4'
>MFU(47'>&&7'5B>4' %+ ' % ' - '+ 0K' "U?7''FA'>' CFK7'
$' 2 &(7'%' %G' Z(,' ' *3! $' ' *3%'
%: !' ,(8(/& \' &7(!"#'/ ' ,(8(/& ' "#0:)'
, #& .)'(' & + # '(#"8(7 .&7 #/"#/' ! ' (# !%&
*3%'%) * ''; ?77' YUF4?' %** '>C<' % 5(*3%' + 'B'
! '4@7' BF=67C?>4FA!'?UAA7C<7A'4F' 4@7' 6&>3C43'' F''4@7'?&>L7'
>C3=>&' 74B ' MI' Q@3B@' 4@7' 3CHUAI' Q>?' <FC7
%) ' ' <+ ' (')%! %'33?3' ' FU7A.Q@7&=' I'
6A>B43?7'4FF'Q34@'<>A8C7??7'>C<'?4A>CV7'QFA<?' 34@' F<3.'
B3&&7?' BB76 43&>43FC?' B43FC?'A7B3??FA37' FK>&5'>C<' I6F-'
4@7B>&&' ** ' % ?' *$ ' %G';%*(5' +' C'B>??'F'' >C'
''7CB7'BF=3447<' MI'>' &>L7'>C<' F'' >=>V7'<FC7'MI'>'
"7>?4'4@7' >?47A' F''4@7' &>L7' >C<' QC7A' F''4@7' "7>?4'
Q7A7' &3>M&7' 4F' M7' BFCL7C7<' MI' Q@>4' Q>?' B>&&7<' >' FK>&'
B43FC' K F' 4 ' F% ' ' 3L' :' * ' C' A7?67B4' F'' 4@7'
QAFCV.<F3CV' F'': % $ % '>C<'?&>L7?' >?' Q@7C' 4@7I'@>L7'
BF= =3447<' 4@7'4'?>I ' FA' 67A?FC>&' 3CHUAI ' CFK>&' >B43FC?' @>L7'
M77C' 6AFL3<7<' % ' C : ' 3C' % G' < ' P>C' , +" @7'
6A>B43B7' F''CFK>&'?UAA7C<7A'F''>C3=>&?' 6A7L>3&7<' 3C' ! &>C<7A?'
UC43&' 4@7' ?3K477C4@' B7C4UAI
&#'& 1D(77)'%! , .)' *()' $# 9(7+: &#,&
K F ' F% ' '%' :' %+%' 4' ?CF4' 'FA' >CI' &FCV' 43=7'
4@>4' 67A?FC?' >A7' <74>3C7<' 3C' 4@3?' BFC<343FC UC&7??' 4@7I'
@>L7'M77C' =>CB36>47<' CFK>&&I '
!7$ 29"(7' %' 6' % >' # 6 F"(77N&' -)(77'
Z &/' $' ' *3' F' $' .+' ' *) %'
N ,&$ I \' '!: #(7
%'% '@* >' ' :- '@* $ ';%))5+' @>C' 7?47' C<'
?&767' I' ?@U3<7' @>U7' CFK3>&&7' ?' 7YU7A74@' MF4@7' C>4UA7'
>C<' 8IC<7' ( ) 3% '/ ' 5 ' K33' BBKKKL33'
76AIUICV7' 4@7' CFK HH>&&' <7A87C7?' 2,K) ' 3C' +'6% ('
@* $ ';' 5' 66' K3' K F' 4@7' ?U67AC7'747AC>&&' A7V3FUC'
^U@>3A'CFK3>&&'?8I3?' =>I' =>8' ?FV7FAC
D" #+'N"-FB0(+I'%' 7+'V !! &!" :+' Z(,'
' '*3+ ' $' ' *3%'%## !', (8(/& \
$' #0: " :+'%: !$:7'%(8$:7' :#*% 7&+ 8&
3'34>' FF 4 ' ' % ' 8?' N>6R5I'54V @7' ><H>B7C4'
6>A4?' M73CV' A77<' 4F'=' >CI'CFK3FU?'@U=FUA?'4@7A7MI ' %) '
"U ' * / * $ ' ,,% >CI'QFU&<'@L7'34'>C' UC6AF'34-'
>M&7' 7KBA7=7C4' >C<' F''>' CFK3FU?' FA' @UA4'U&' YU>&3&I ' ?*X
4 '@ ' 3L' ;6A' "73CV' F'4' 43=7?' CFK3FU?' Q@7A7' 4@7I'
&3V@4' C' =>C'M7>?4' 6&>C4' %*K%' / !>' F'X,4'
' ' @>4'?77=3CV' >V>B34I'3C' C3=>&?' Q@3B@' '=>8?' CFK3FU?'
C>4UA>&&I'>LF3<' Q@>47L7A'3?' CFK3FU?' FA' UCQ@F&?F=7' %* >
& ' '-' %!' N>VVVI' $ >RV' @7' MF<I ' 'U&&' F'' CFK3FU?'
@U=FUA?' ''77&?' 4@7' 4FA=7C4' %' ' * $ ')*' '
' *' @7' &3L7A'3?' >&>I?' V3L7C' 4F' 4@7' <FV?' >C<' 4@>4' =>I'
6F??3M&I'M7' 4@7' CFK3FU?' 6>A4' K F & '@ ' F *
' 3A' 4' M&FQ?' FL7A' 4@7' Q@F&7' 3?&>C<' ?47><3&I ' >' BF&<'
CFK3FU?' Q3C<
$'4' ' :'7!) ' ' "8" (7' ' %
,), ' ' ' *3*+ B' VU3&4I ' %) ,' < & ' KB%'
* $ '%*%@ @74@7A' >V3B3>C?'>C<' ?4AF&FV7A?'M7' CFK3FU?'
' VU3&4I' F'' >' <3>MF&3B>&' BF=6>B4' >C<' BF= =7AB7' %))'
' /) ' 333' 5A' F' =>C' FA' FB374I' F''=>8?' =7C'B>C' &
HU?4&I'6UC3?@7<' M7B>U?7' 4@7I' >A7' CFK3FU?' UC&7??' 4@7I'M7'
CFK3FU?' 3C' 4@7' 7I7' F' 4@7' >Q
&#'& 29" ""+#&++' Z$ &' 'H'F +Q %&O:(7"!)'
'+!(!& $.&"#/' # 9" :+' '"#0: " :+
K) (' . F& % ' B' 0';%) 5'* @>4'4@7A7'Q>?' >CI'
3C4A3C?3YU7' CFK3FU?C7???' C' 34 ' >=' I7 4' M7' BFCL3CB7<'
%) ' (; < ' G' ' '+,' @3?' ?U(7?&3FC' F''
4@7' CFK3FU?C7??' F'' 7><' 4F' AFC-QFA8 ' %***' ! 0
' $ ' LC' ;%** 5' ' @7' 67BU&3>A' CFK3FU?C7??'
F'' 34?' B&3=>47' @>?' 6A7L7C47<' FA4F-M7&&F' 'AF=' 3CBA7>?3CV'
3C' 4@7' ?>=7' 6AF6FA43FC' K)>' ' ' $ ' ,'
FC'7AA3CV' 4@7' B@>A>B47A' F'' CFK3FU?C7??' 4F' L7V74>M&7' >C<'
>C3=>&'&3'7
) ' 6' 6 '7N&9' ' ! % B' 8+Y %' ;' !":) '
;FR' #:) ' +' #:&' H' ;' #O"0&' #)L&' ;FR' V
#) &' R# "&' ;F6 N3I' #) ' V' ;'#") &' ;FR' ;) &'
R'#&) ' Z %&!"'' $ 8' $ %'+, '%$,') ' 6^"
)(#'&'! :.7&
%')'% ' % ' * '++,' ! FA' 677?' M3.37U7IZ' 3C' CF' &FC<7'
@7A' (A' 3?' Q7AA7' CUI' >C<' FC<7')'O R^' (' ' '
*')' ' @UAVM' CUI ?'>C<'>CV7A?'?7A7' %+--'4A') %'
) -' @ '@ ' %+' 'BIA' CL7?' >C<' <I???3?' 2,K+'
O #%, ' 7?4'>'47AQ>A<7' @ 14' <F'4@7' CUI7
' % ' ' & ' * ' ' ++,' ! FA' 677?' M3.37U7IZ' 3C' CF' &FC<7'
?4AFI7 'M7?&7'4' 'FA' <7<7'CF'CFI7')'3 '7' 1 %' ' J &
$' +' ; ?7@>&&' 7L7A'&>?4' Q35ZFU4' 3A8ICV' FA' CFI7' %+)' 6
' '@*) ,'3C'@* ' @* $ ' ; F&?5' ' % ,' 77' ?@U3<7' @7=
<7?4AFI ' ?' 6AI?FC7A?' Q77' ?@U3<7' @7=' MAICV7'4F' CFI ' %+
? ' ' ,I* 'K3L' ! FA' >&&7' <7M>47?' ' >BBFA<7' ?><'
4F' MAICV7' >&&7' CFI7?' >447' >C' 7C<7' %)' ! '
' ') ' ;3 >K5' ' % ' >&<U?' M7' CFI' F'' 4@7' QFUC<3?'
VF443C' 3C' 4@3?' &>?4' M>44>&&' Q>?' ?>' Q7AI ' 4@>4' P74B R' % '
% ' 6%' ;% 5' ,*' ">C3?@4' 'AF=' 3A4@' >C<' "FC<?&>U7

$4@7'?8I' ! FA7MF<3#' CFUB@4' MU4'CFI R'
I' - ' ' ' % '@' "' % ,' &&7' C>(4?F' = UB@' C3I7'
@>&<7' CF' =FC' 4C' @3?' @7A4' 6 ! ' % '*)' F' C7U7C' R&7' CFU=MA7

4F' = UB@' CI7' Q7A7' * ' 'C + '; 5' %) ' 67' 6>4A3>A8'
?>Q7'@3?'VA7#'CI7')')--:' 4 # ' % ' ; 5' % *' F'
<FC' @F=>?'>&' $7 CI7'>C<' M7'VA7'' 5$>4@7'BFQ4M
$) 6' N&9' ! % B' 8+Y (' ;' : :"-&'
;FR' #:)&' R #:&' #=&' ;' #)0&' : 0&' ;FV
)&' ;F6 # "&' ;F' # ' V' ;FR' #)&' R #&)'
Z %&!"' $ 8' $ %'+, ' %'*, ') ' \' & ?
%(+' (7+ ' (!7)' & ' '+ *' * ' '
>'*) ' '*) ' ! '"#0: & \
$' %' ' (##)' ! :.7&' =&9' %((++' ! '
%(8' "#0: &
>' 91 ' C & ' ' H7C' 4@7' &34@7A7' BFC47BBFUA?' 4@>4'
UI7<7'@3=' '@3?'&IL7' *,:' " '@ ' *') '%K +'
>CI'@7'CUI7?'>C<' >L>I&7?' R*+*'0 '@ '@ 9' +0'
+ *' C'>UC47A'@34'CUI7<7'=7'CFC'7C<7'QF&'3B@'=>87' *2'
4A') %') B' @ '@ '%) ' "M>A=7' 3?' M7'>&&'4F'
>CI'=>C @34' =7'4FUB@I4@'>C<'CUI4@
0') ' 1' / : * ' ' J %) '; F&&?5' * '6>CC7'FC<
@7' C F C (4' @I=' CFI7<' Y' (' 1 # %' J & ' ;% 5 *'
63CV' &(4'=FF?4' CFI76' 63?' ?@36' M7C' '7&&7' 1&F<3?' F'' 63?' QFA&<'
)' * ' * ' ' %' 34'=7UI?' 3C4F=' I C<' G'C378 &&' =7
CFI7?')')-6;' # * ' L3' ' F' ?4AFCV7' 4@7C' Q>?'
4@3?' V7C7A>B3FC' FC7' <UA?4' 34' CFI7') 7.*' $ 3C'
7AC=>C') -' ;% ,5' *9 $ I=>VIC'Q34@' =I?7&'
Q@3B@7'Q>I7?' 4@7I' =IV@4' 4>87' 4F' CFI'FUA'7C7=I7?' =F?4'
%)) ' < % ' * ' '), ' @7' 347E(=>C'U&&I'
<7'7C<7<'4@7=?7&U7?'>C<'?2 7CFI7<'>C<'@UA4'4@73A'7C3=37?'
?/ ' ' ' : 7A7'5' ' ' *!+$'KKK3L' F'L3F&7C4
7>B@' 7C?7' @7A' L3A4U7' M3C<7?' C<' CFI7?' FA' 3FI7?' 4@7' 3C<'
3C' <3U7A?7?' 83C<7?
>4@3' : ' ' F * ' ;7<' 2C' *,B' 4F' # +' 4F'
4AFUM&7O4F'>CCFI' F4' CFQ'3C'U?7' A' F@C?FC'?>I?' ?'
>' FA4@7AC' QFA<' 34' 3?' YU347' BF= =FC
I' % ' C' % '@ ' "' %) ' @7C' C>MUVF.<7.CFE>A'
Q>?' CI7<' 3C' ?A'F43C<7?' % ' F%G'B'F ' ?' ' % * ' 34@'
@I=' .-#3A87<' &&7' 67' MU=7E'?F' MF&<7' ' F' CI7' @I=' FC-'
'7AU=' %'>;AAFRA' 3%' ! '**%' ; UM\ 5' 7' CFQ=MA7' F''
?3A' C3BMF&>?' 34' C(I4' =7' 4F' A78IC' +,. '4A' ! ' '
; F&&?5' '+ *' " U4' 4@7' 3C'FA4UCI'F'' '&??B@7' CIFU4@7' 4@73='
=FB@7
' +&,'"8 & + #(77)' (#,' ' #+!' G ' %
%' 5;A' " '@ % 'BL3' % ' @>3A>'CFI(<' Q34@'VF<3?'
QFA<7')'@;AA' *,'))% '67'&7<7' I66FC'&IU7' 7UI4
@7'67C' C<' CF&634' *'>C7K@7A'6>4' CF37'4(
4' - '(#,' ' ' =&9' #&+&?$'! ' / "&=&
)' * ' F*')-' F%G' ' F' IFI'UFU' CFV@4' >4' @3?' CF47'4@>4'
CFM3&&3?'! ' C7L3C' $ ' *' ')* ' ' * ' &8'<>'
MI' <>' @7' ?4U<73&' = (' >C<' CFI34' ! o' @ */ B'-'
/ / ';% * 5% ' @7' B>?7' $'4@3?' =I' (< '@7A' ??&'7' Q@3B@'
CFI74@'?F
' % * ' '(:+& (##)(#'& '%(8E
R*-;' " '@ ' *' ' + ' '<7L7&?' 6>4' '
MUC<7C' ?Q>'6>4' >3' =>I' 3FV@4 CU I7' >&?' =I87&' >&?' 6>3'
Q>&<7')' * '4A') %' B) ;F* ' * ! &' *)' &?F'34'
CFI74@' =78I&'4F'A7CC7'>'47A'=747'FA'AI<7'=78I&' * 2)
4A' ! '<' F&&?5' '+' A>QC4ICV7'4F' U?'4@7'7I4ICV7'F''
''??B@7'4@>4'CFI74@7'CF4')7*-' 4 % '@% *' 8?'
% + 0,' 'CF4@33('>U>3&74'>' MU4' FU7A'4@>4'34'?FA7'CFI74@'
@UA474@')76*' & ' ' 6';3 I 5' 7' CF374@'<7?4AF3-'
74@'>C<'>&'4F' 4@3?'<A3'4'4F' ?4A36'@3?' 6FFA7' 47C>C4
. ' #+!' *' (' & + #
; + / * ' * ' ' ''67' 6F67' M7 LC6AF'34>M&7' G' ?&FQ'
3C' @3?' <7<3?' '6>4' =FA7' CF I ('4F' @3=' G' >&&7' F67A' %'>';4I
'8 & ' J & ';%) 5+ ' C' 4@7'F4@7A'?3<7'4@73A'3C I YU I 47'
=>I'CFI7'4F'7L7AI'=>C' ' ' ,% 3C' @F=?'@ * ' * $'
;% , 5' '*% ?'@7'4@>4'@><'4@7'VA>B7' $' ,' Q34@'@3=' 4F'
Q@F=' CFC7' =>I' CFI
&#'&) & ' / ' %
% *' L ' @ */ ' - / / ';% * 5 ,)' @7A' Q>?' CF4' >'
Q3V@4' <3>4' '7&4' ?UB@' VA77'F' >?' CFQ' ''77&7' FA' @>&<' ?UB@'
B>U7?' 4F' Q>I&7' @3?' CFI7<' &3'4-
') (, &' N#*(")(, I' 6' Z '$' ' * , ' ')0
% ' ! :!' ! ' ,&(!% N'#7(!&' '!' , *#I \' %&
&9&' :!" # $ & + #+' .)', *#'#/' (+' ('!"+&, '
.)' (#"&'(' (#!&+' "#' >V3;
% , ,' C %)&G ' % ' ' % ' @7I'B@F87<' 4@73A' A3L7A?'
Q34@' 4@73A' '*, %! ' g45R' 4 & #' , ' %)&' * (' '
* ';% *5' ' @7C'B>=7' A7LF&U43FC>A!'4A3MUC>&?'
VU3&&F43C><7?' CFI><7?' 'U?3&&><7?' % * ' !P ' ' '
%) ' F' VU3&&F43C7' Q>?' 4F' M7' ?7<' + / ' 4@7' <7A' 6A77'>C<'
73B@?7' 'Q7A7'4F' ?77' CF' CFI><7?
% ' -' >493' ' ' 8?'% ' ' +' ' * B' @7'
F@>Q8X'Q@F' Q7A7'BFCB7AC7<' 3C' 4@7' CFI><7' F''4@7' 47>'3C'
"F?4FC' @>AMFA
&#'&") (, &' , ! ' : f ! ' , &(!% .)' , *#"#/'
(7+ ') (, "!!$" ' 6' 6
45V # ' 9 ' ' '#' # ' FUC<?' F'' 'U?3&&><3CV'
>C<' CFI><3CV' g453' O' % $'#'3(K' IFC?'U?&&&><3CV?'
>C47?' CFI><3CV?' >4;' ' : '=' 73??' -'2' * '
' ,' ' @7' A74B@7<' 7AAFA3?4?' 'VU3&&F43C7<'?><'CFI><7<'
>C<' =34>3&&7<' % 8CFQ'CF4' @FQ' =>CI'
!7$) (7+ ' 6' % ' Z(' ' * ,% ' N " I '
$ 8' !%&& 7('& $ 8(#:$('!: &' * ,%' "# !%&& ,&?
(!8&#! 7 &F&!2$ "7("#& \' N && O: !+I
' ' % ' ;%*) 5' '+% ' FI>&?' B>CL>?4@7' @UC<A7<'
7&&?' %*,%' 5' C ')&' $' 3 K' %* ' >C<' F''
34AI'>C<' FI>&?' >CL>?
! - (:'& ' 6' 7+ ;FG #) (:#&& ' 6
#' "(# ' Z %&!"'' $ 8' $) I
$' '+ : '& $ (##) (#'&' (#:"+(#'&
)' 55A' & * ' ' J %) '; F&&?5' +++' FCV7' &>?47<7'
M>4' U8' <3?4>UCB7' F' 67' MA767A7' VA7<4' CFI>UC7' 2 *' 3C'
' UAC7A') ') ' 3-* !';% 5%,+' @7 I '<F7'U?7'
4F'A7'FA=7'>&&' BF=FC' CFI>UCB7?' ('"' < ' 0>'
6%) (' + 6' 3L';%)5 %*' @7A7MI' 4@7' Q3C<7 =>I'<AI'
/' >&& FMQ7MM7?' FA' ?UB@' &387' CF3>CB7?' 1> ' '
)) + ' K&33' ' F7' 'FA' 4@7' U=+7A?' UC' ;CFI>CB7' >?
C7>45' 'V7C4&7' 7Q' '>&&?' 4F' >&&>I'4@7' @7>4' %)*' '
' ' $ / *' ' (! ' @>4' 4@7' <3?4>CB7' F'' 4@7=' M7'
?UB@' 4@>4'7L7AI' A77' M7' CF4'>' CFI>CB7' 4F' @3?' 7&&FQ?
4' %&' ' #,"!" # ' $(' ! $' .&"#/' (##) &,'
! :.7&,' '%(8&,

)'X+ 'C +'B&K3'% 'S ICV' <Q>A<'<7<7'@3?'<3&3V7CB7' 4F'
>=7C<7'R$7 CFI>UC77' F''67' BF=>=UC7' 676&7' %+ +') '%,'
' ') ' A7>=M7' @7' A3B7 P3?H' VA7>4&I' 7C@>C??<'
@7A7' 4F' 4@7' F??'>C<' FI>CB7' F''>&&' 4@7' S3CV?' UMH7B4?'
% ' ! ' ' ' ' ' ' <7' %) 5 &3' L33' % ,' &FU4@7'
4@7'Q@3B@7'3?'>C' @7UIC7???7'>C<' CFI>UC77' 4F'<FF' Q7&&' %) '
L ' ' ' %) ' 4@7A' BFIC7?F'' =744>&&' Q7C4?>=FCV'
4@7' 67FF6&7' 4F' 4@73A' VA7>4' CFI>UC77
' %&' ('!" # $(##)"#/' ! :.7"#/' (##)?
(#'&' 8 7&+!(!" #
X+ X ' F ! ';% * 5 ,* ' C' <3?4UAM&ICV'>C<' CFI>UC77'
F''4@7' BF=67CI7' %+ ' ? ' F* ! ' % 0,' @7' Q>?
?FA7' >'7A<' &7?47' M7' QF&<' <F' 4F' @7A' FCI' VA$7" FA' CFI>CB7'
>I7C?4' @7A' >LFQ7' % ' ' * ' ' BBK3K' 2 2
7' ?@>&&' VF' >C<' F' @I=' ?F=7' CFI'UC77' >C<' &F=>V7'
% ' ' ' '<' \' $' KK333' ' B&FU<' F''BU=MAFU?' VC>4B7?'
<F7' @3=' =F&7?4 ' @>4' 'AF=' 4@73A' CFI>CB7' @7' CF' Q@>7A7' B>C'
A7?4' P%*+ ' % ' ! * ' 3' L3' &>47[7A' ?=>B8[<'
F''CFI>CB7' FA' UCA7?4' >?' '>A' '>A' F''7K67&&7<' R
' '& F I>CBI ' 6 % bB
%+K+' *] @ % ' ' 0%' 3?B@37'?' 4@>4' =3V@47C '
4U=7' 4F' VA7?4' 6A7HU<3B7' 4F' 4@7' 8ICV 'G' CF3>CB37' 4F' >&' 4@7'
S7U=7
! ') E(:!' e$' 6' Z %&!"'' $' '
'$' 2 ' 6: #0: " :+' N! I' '(:+"#/' (##)(#'&
)'%+ '4A') %') B' F* ' * ! ' * ' AIC8ICV F'
BF&<' Q>47A' '>?3IC(7' MI' FA7' =747' I?' CFI>C4'67' MF<I ')' K+3F'
) ') %'@ * 'RB' &?UB@7'4@3CV' CFI>C4'F' IFUA'@3V@'
7?4>47' ?B@7Q7' >&' Q7I ' % '3C' 4AI67 *G(' + ';%* +5
' 'KK33' +,%0%@ 7>'BF>&' U?4' U?@7?' FA'>CI'F4@7A'4@3CV'
FI>C4' % ,'3C' ' ' UAC7A') ') ' 3-* !;% 5
+,;' A<UA7'AUMMI?@' B>AA73C7' FA'>CI'F4@7A'4@3CV7'CFI>C4,
) (#' N#*(")NLI' 7+ ' C F I F > U ' Z ' & '
&(7'&' G,%' ' * % ' ' + % '&!' ' >'+)%
$' ' '+)0' ' +3'#"'I \' 7"O:&: ' 8(,& $. (#,)'
$7(= : &,' *"!% !%&B& #&?+' $'&!("#' $ #"!+
%* *' ' '%%' 33' @3?'B@7AAI.MFUCB7'4@3?'&FL7<'
CFI>U' I'<A3C8' 'FA' 7L7A' M7' M M' 4 ' +!' % $'
@ % ' %)%' FUA' FI7>U?' UA>(F7?'>C<' 4@7' <7L3&' 8CF Q7'
Q@>4' % +,'2 ' *&% '%33',+ ' FU'Q3&&' L7C4UA7'
4F'?3&'4@7'CFI7>U' % ' * $ ' % ' >F')' V&>?? F''
CFI>U'>C<'?43&&' =FA7'B>8?7
)'%N&' .+' $ 8+' $' ' '7(+

F''>3A?U347?' @7'7>?4' <7?4AFI7A'4U'UB33 '>33U'>C'UUU/'
!) 7' % ' 6' 8+' ;' # "0&F' ;F6
T)&F' NR' "8)&FI' # "F' ;FV' #)$:7' (7+ ';FR'
F$ &' RFV' F$:7' Z$' 9 ' 6'H I
$' !8)"#/' ! :.7&+ 8&!" &+ 8&' (7+ %(8?
$:7'%: !$:7'# 9" :+
)*9.' 1 # % ' + &' K3' ' I&7' 4@FU' ' CFI'U&' 4F' =7'
)* ' ' C % ' ' @' ' 3+' 333' ;" F<&' 5' 67'
CFA67A7C' Q3C<7 3?' CF3'U&&7' 4F' @>=' 6>4' @>U7' 47?3&7' ' '
* ' ' ' ' ' ' B4 ' ?'4@7' =>47A' F''4@3?'
M33&7' 3?' VA7LFU?' G' UI7'U&&' 4F' 4@7' BF=7C' 676U&&' * '
' F* ! ' ' M03' 67C7' =' I' QFUC<7?' &??4' FCI'
CFI7'U&' @U=FUA' BFAAU647 '4@7' @I<' 6>???FC?' 22' @ '
' * ' BBB&L3'RV+' 4'3?' CFI'U&'4F' =7' 4F' A7BFA<7'
34' (% +' F ' % '' % ' B3' ;%))5 % ' 7B&>A3CV'
4@73A' CFI'U&' YU>&3437?' 3C' >667IA3CV' F'' C>4UA7' Y2+>'
' ' * $ $ ' !' @* $ ' 8?' ; AF?>A45' ' , 0%' F'
M7' 'FA7.63C<7' C' =>CI'>'CFI'U&' ?4FUA7' F''Q3&&3CV' M>&7
4 ' ##)&, ' =&9&, ' %
&& ; F&&?5' ' % '47A'?3K7>C<'4Q7C4I
7A7' F'' 7A<3BU?' @3?' BF=I33V' A4@UA'Q>?'Q7AI'>C<' CFI7'U&'
6 ! ' * ' 67' 8ICV' F'' ?4A>CV7' 4FCV7' Q>?' VA7L7<' >C<'
CFI'U&' >C<'MAFU(47' IC'>CF67A'PM3?@F6R' F''@3?' FQC7'&FCV>V7'
&#'&'$') 2$ "7)'%! ') 2$ 7'"&++' 6' 6 '
R*+7 & # $ * ' ' ; 5 *>' 7443CV7' CF37'U3&I' 3C'
4@A>&<F=' 4@>4'4@>4'@F&3?BA364UA7'?7443&@'6AF'34>M&3C''A7<F='
R*+9 'C% ' '@ ' L=' K33' B * C 2 '" I'C3V@.'
C7?' F''7I4@7A'?47AA7'@3?' FFI'U&C7???7' 3?' 47=6A7<'
4'S F I 3333' I' 6' 6' 6' - 'D 2' 'W'" %' <'
)(#'&' @>A=' ''#0:)
>;V:' ? ' ' ;% 5 %++' @7I' FUV@4' 4F' A7YUIA7'
4@7IA' 6>??>V7 Q I4@' BU47' CFICV7' >C<' BFC47C<FC' ' %'
F+, -6 ! (' @ ' ' >=<7C5' +' >'' 7&I'>??UAI<'AF='CFI7CV'
F''>CI'M7?47' >R;4PW @ #' '% 'L' ;% 5 *' @7'B>U?7'
Q@I'@7'4>874@'4@>4' >CC3B&7'3?' 4F' 87767' @3=' 'AF=' CFI3CV'
! ') "(/ HHH' [' 6' %(!' (##)+
'=&9&+' =&9(!" :+' "#0: " :+'
%')*-;' " '@ % 3' ' '4A7' 37'6AF'34>M3&743&'=>CI'G'
CFI>C<' 43&' C>C7' >534 'C % ' '@ ' '3'L3';"F<&'
5' 7 '?4A7I'C76'>C<'M3C<76'CUI ICV7'A7CFCV7F'A?Q=C7'
X++' F %' * $ ' K&L333',%*' A>B7' F'' Q34@7?4FC<ICV7' F''
CFICV7'6ICV7?' >RAR C G)&' ' ; 3?4' ' F= = 5'
% ' *) ' V 7'>U4?7' CFICV7' >C<' 6>IC'U&&' UC4F'
4@7' S3CV7?' &37V7?'>C<'>&&' F4@7A'?4A>CV7A?
F I & ' L>A3>C4' F'' 2 6
! ') 8 & (! ' 6 IB Z$' 9 ' Q I' ##)(#'&'
+ ' * ' B+ +C 2 ' F' ' ' ' 4F'
$ ' ' $' $ ' ' ' '
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F :+' RF6' F :+&' R F *+N&' F +&') ' F:+' RF6
)&+' NR F"+I ' R # " +&' RF6' # " +' N6 F :+&I'
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)'* *+ '&!' ') ' (\' (:+"#/' (##) (:'&'
=&9(!" :+' ! :.7&+ 8&' &!'
%'R*-;' " '@ % 'KKKL33' ' 7A7'CFIU?'QFA<3?'>C<'
7&<' CF4'>V>IC') ')*6-' & * , + '333'% +' ; >A ('
>4' 3C' HFUA' @7A4' CF' CFIFU?7' 'FC4>?37' F' BA767' 34'
B>U?7'=7' 4F' 2'47')' * ' % '- % ')(' + ' '67A' 3?' CF'
63CV' =FA7' CF3FU?' 4F' >' QFUC<7' *22' 4A') %') B'
@ ' @ ' ,%,' AF'34>M&7' >?' >C' @FA?' CUFU?' >?' >' =FQ?'
) -6;= ' 4 # + 'KL33' L33 ' * % @>4' I7&<ICV' ?>I<'
4@7I '?@>&' M7' CFIFU?' 4F' IFQ ' ' o ı ' / * ') M' UB@7'
>?' >A7 7UI&7 ' >C<' CFUV@4' >C<' CFIFU?7' LC4F' 4M7' BF=7C'
Q7&&') 7 ' : ' : G ' * -' % ' M' FQ7' CFIFU?'
>C<' MUA4'U&&' ?UB@' >' L>6FUA' >C<' ?>LFUA' 3?' > *' @ '
! ' '7 -'C ' % ' @F ?7' CFIFU?' >C<' '34@I' 4@3CV?' M73CV

4>87C' >Q>I ' %)*' + . " ' * 0)' ' %%6 3L7A?' =7<3B3C7?' Q@3B@' >4' 4@7' '3A?4'U?>V7 ' Q 7A7' 7KB&>3=7<' >V>3C?4' ' >9' CF I FU?' >C<' @UA4'U@' 4F' 4@7' 83CV[?' ?UMH7B4?

&#'&$') - :+7)' %! ' 6

* ' % ' + ' 2 > ' F I FL?&(' *)+ ')/-)' : ' * ' ;%) 5' FUC?7<34B@ 43&&' 4@>4' 43=7' @><' 7C' L7A I' CF I FU?&I' 4F' >&& 4A>L7&&7A?' 4@>4' Q>I

$) (' '+&& 9 * " ' 6 B

)%' U '@ B ' % 'L ' K3&' +, ' ?' FA' ' FQ&7?' 4@7 I' @>U7' >MUC<>CB7' F '' >AAF4?' >C<' F I A>?' = FA7' 6&7>?3CV' C' M7>U43 7 ' ?677B@' >C<' F4@7A' <7&3V@4?' 4@7C' 4@7' >AAF4

2)+(#'&' F(#!' =(' $' 9 0 '

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*8 T')' Z $' .+': & "/"#' # 8 ,' :+&' 8 8 #7)' * "!!&# & ' * '+! "B&' (

% ' '? &' DDD' 2 !3 ' 5' @>3A' <UA?4' C@' 47C' BU=' @3=' 4F' 4>8 ' >' CF I 43&' @7' 4@>3A' CFQ3?

D&7' =("(#!' $' 9 ' ' 6

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8+Y %' VF3' # +7&' # + 7' VF4' # ++&7' A

VF3' # D7&' VF4' # D&7' 4 # DD&7' 4F' # DD7&

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' ' ! %$' ' ! ' BB K' C' ' >?@3FC' &3&7' UC4F' 4@7'

F???7&' F'' >' QFFC<7C' B>C<&7?43B8' %*%+' *' ! ' F%5' F'

,0' ' F2?4' 'FA' >' Q@3B@' >C<&7' %+*' + ' @7' CF?&7' F''

>' B>C<&7?43B8' 3?'4@>4' 6>A4' Q@3B@' @F&<?' 4@7' 7C<' F''4@7' B>C<&7

> ' 1 8*+$ ' F) ' 0' '%' 47=' 'FA=7<'

&387>' FE7&' FA' FB87#F'' >' >C<&7?43B8' %*+%' & 'G'

" ' $' % ') 6 + '333' '6>U&4A I' F&<' BFCB7' Q>34@'

4@7' CFEE&7' MAF87' F'' ' %'%*)+' 0 # ' %' ! 'B' +-- ' F74'

8?' *' ' ' B>C<&7' ?4UB8' 3C' '&>A3CV' ?4>47' 34@3C'

4@7' CFE7&' F'' I A7CB@' 6&>47' ' %* %' '' ' ' >' *' ' ' '6>3A'

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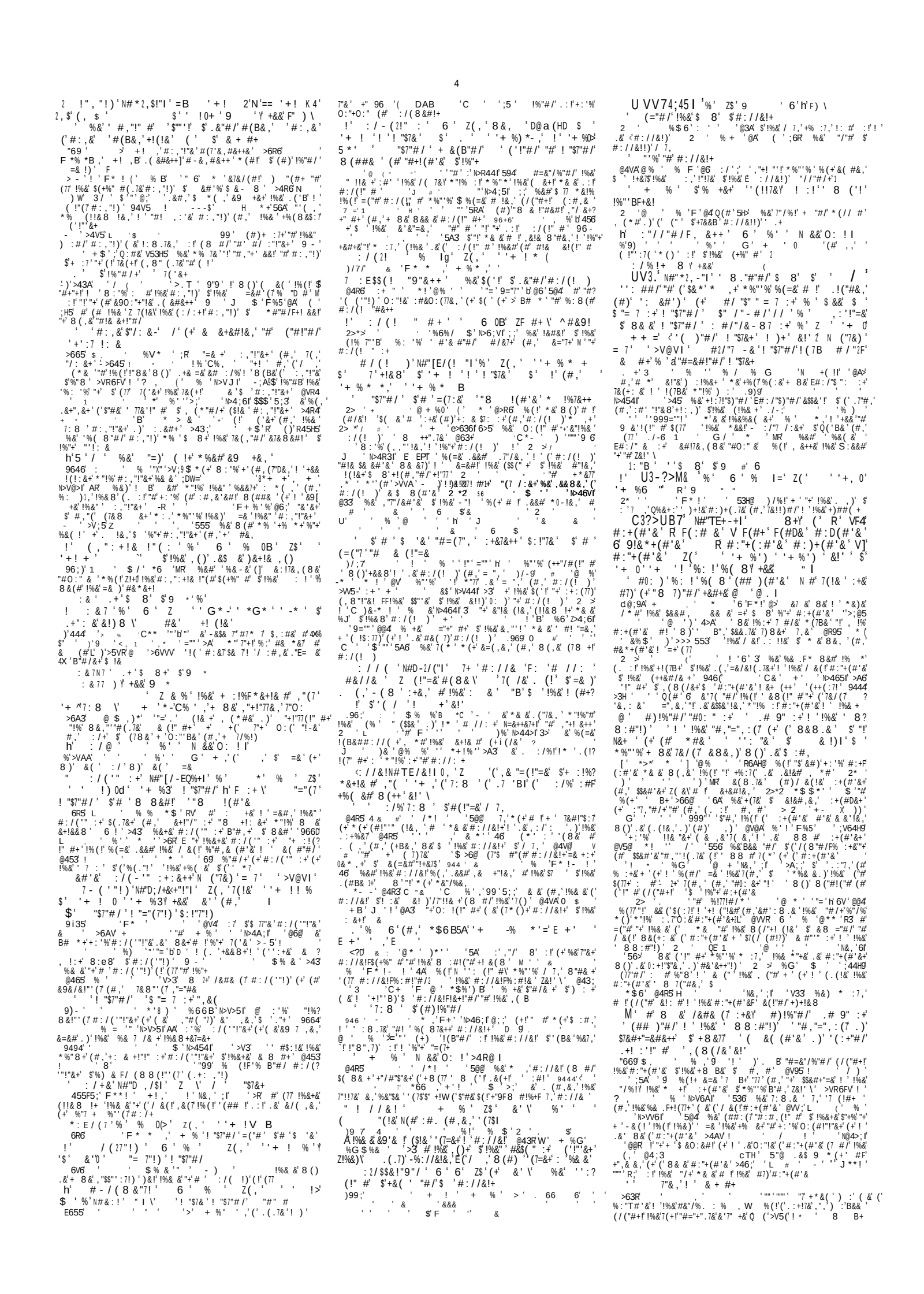
&3B7' 4@>4' F''>' 6>3A' F'' ' 7&&FQ?' %* >' ! ' ' ' ' '

: '7&"' "' $' 9 ' h' F"' \' +))' %) ! ' (# (' "," ' ': "#'! "#' + 8& # : '7&"' &"!%& ' .)" !+&7$' ' ' 8 ."#&,' * "!%' (' !&", >435' C ' !W : ' ' (' RV5H> : '7&"' (' "," ' ' #!("#+ '("" Z&!' \' D - 6' 6+ B ' ' ! ' >6R : '7&"# * %"' %' ' #+"+!+' $-' (# /(#"' % + % : +F' #!("#"#/' (' "," !& 8&,' # : '7&"' (' "," ' 8 ."#(!" # "!%' !&", : 7&"E$& ' %>' C * ' Z &&'] c A \' &(? "# /' (' # : '7&: +' ' # : '7&" >4RV 4 ' ' : #' ! * ! ' , / * %$)' C% ' ' !%& '"(' '7 +&,' ' # : '7&7$& : + Ü &73'F(LC33' Z &&' (I' (="#/' !%&' $ 8' $' (' # : '7&: +' $' (' : #,&,' +%(& ' &+ ' $' !%&' (!%& '"(' (#,' + &"8 / #&+' $' ' & !("# 7"' %&#+ >4;'A" "#' ' 944!' '),) 'C ' ' RR;H> ! ' 8 ()' .&' %& &' .+& =&,' !%(!') #/' ,"+' "$ 8' (!%& '"(' (' &' 8 & ' 7&+#' ##'7&"$ 8' 6 ! ' (# (' #' $ 8' !%&) ' Z!%&' + & 8 F / #&+\' (&' #: '7&"$ 8 ' : #,' ' .7 #/ UB&73C' N#"-FB "#!' $' 7+ ' F"#& ' Z$: ' F: (' h' F >' ($!& ' ' +& ' ' ' ' $ ' =' %&' "#'" (7 #+!"!: &#!' $' &77F#: '7&" ' > -4' ? $ *5 ' ' $ ' & $' Q(B+'%' ,"+' =& &,' "# !%&' . ("#' !%&' +: .+!(#'&'!& 8&,' .)' -"&+'%& ' -#: '7&"# 4 -' 2 #' V' / # ' ' $ ' - ' T!99"" ' %&' #: '7&: +' $' ('&77' ' #+"+!+' "#'" (77)' $' (' +: .+!(#'&' !& 8&,' #: '7&"#' '% 8 (!"# -' >433' 6+ (' , ' ! ' ;3> %&+&' % ? 8 (!"#' (!"'7&+' (&' (7& +!8 +' !& !("#7)" ,&#!"' (7 *"!%#: '7&"# H ' 944 ' 6 ' V ' ' ? ' *G ' ;44' 7: !"#&' &7(+!"#&' (#,' #: 7&"#&' >44V ' ' $ ' / - $ ' &)! * ! ' >>,' %&' : '7&"#&' $!%&' : #%(!'%&,' $&' : #,(!&,' &// &#'&' $: '7&"!#" ' !D ' "#' '+) ') %) !' (# /(#"' ('"," ' "!%' "#' % + % : +' *%"'%' "+' (' ' #? +!"!: &#!' $"#: '7&"# % [+R' 6+ > ', -' !'% 3A' 8'.7 ,F+& : 8'(' #: '7&"# N ' #: '7&"#"' (',, !' (# .&'+& ((!&, UB&7F-N#!T!B7H!VI'!! - & #' 8 ."#"#/'$ 8' $' ' '+) + -3 !'"#' (' # : 8 .& $' 8 : #,+ '%"&,) ." E' 7 /"'(7'(+' +) *0% 6+$ ' !'% 6+$ ' *+ B'0) , $%' 0) ,$ B'E ,%*/ % $B'E ! */ % $ 'E/ * / *) '0/ *0' ! ,'&!' ' N &&' O: !+' (#,' !%&' +&' #,' &7& 8&#! I >43(' ,!' *)' 3 ' > +)V*B% 6V$ ' ' 8 : #,+' $' #: '7&"# (#,' !&",+' '%"&$7)' /7 . : 7"#' $: #,' "# !%&' ! ? 7(+8' $'&77+' (#,'"# .'!&' %&' 436 6+ (' ' !' % R@6 (8 (7&"('&9! (' !&,' "+ # : '+ + : .+!(#'&'+$ 8' !%&' . ,"&+ $' !%&' ,&(,' .('!& "(' *%"'%' %&' '7(++"$7 ,' - ' #: '7&"#+' (#,' #: '7& F(7. : 8 "#+' 6 ! ' >V:' 'E#: '7& F(7. : 8 "#+' : .+ +: .? +!(#'&' * %"'%' (",7)' . "#-' (. :!' (/ :7(!" #' $' .7 ' ' 7) 8 %' >443' KB' , $ ') *) ') ' @>>' !%&' #: '7&('+(' * %"' %' 77+! %&' + (' &+' "# !%&' : '" & %) (e - (+8' %&' Z ! (+. : /& \' /"=&+' !%&' #(8 & E : '7& '%) 7&"#(' 43,' J ' ! ' ! > +) *)&, $!%&' 8 &'$7: ", %) (7"#&' +: .+!(#'&' $' (' &77F#: '7&: +' 9444' % + ' 9 =' RH9' %&' (: !% ' &#&' +' ! ' + &(B' $' !%&' E#: ' & F%) (7(+8' * '%"' %' ' '% 8 (!"#+ %& : 7&+' (&' 8 & 8 . , , & ' 6 ! > +)V*0' ! * / % $ ' !%&' (! $!%&' #: '7&: +' * %"' %' ' #+"+!+' $ ' , " ? 7(+8 ' 94 -' 6+ - ' ' ! ' '6; V)'+ $'$!& .+& =& +' !%& ' +: .+!(#'&+W /7: !&#' 7&: '"#' E#: '7& F % + % "' (", ' / : (#"#W %(=&' .&&#' $: #,' (+' (.# 8 (7 . ,"&+' >43;' 4 #' J' 4 & ' J % J ' ' $ ' 5;> & 'B' ('7+' E#: R7& F !&",+' +: .+!(#'&+' * %"' %' * %&#' "7&,' * "!%' * (!& ' : #,&' &++: &' ' ! & (!&,' * "!%' (,,+' (7B('"+' ' $& 8&#!+' (&' &+ 7=&,' "#! '#: '7&"#' (#,' (7. : 8 "#' " ! '7& . (#' . ' \"** ' 7+ 'F. (#'%&' (&' :(. & (#!'! /(+!& ,+' %(="#/' !%&' $! !%"#' (#,' = &' !"' (7' "469' '"#' ' $! ' %' ' ' ' ' >V@' %&' : '7& . (#'%* %(=&' !%&' /"77+!"#' (' ! : $7 (! '%&' 7 * & ' (! $' !%&' ("B'+ 8&!"8&+' !&'!&,' .)' (' +%&77 ' # 7& .9(2!! %"(!&'%' N $' 8 * ' 1 * ' +) %' # ' 34 %& &' (&' ! * ' 8 "7"&+' $'#: '7& . (#'%"(!& 8 7: +B+ UB&7F3<' N#"[EB7-",I' %' Z$' 9 ' h' F " \' "B&' (' # : '7&: +' "#' $ 8' ' (&((#'& >4RR' "# 2 ' +/ / ' D44' ' C % ' ' 99"" ' *> ' %&+&' (&' &"!%& ' 8 & &#: '7& ",' . ,"&+' +7 8 (7 (#/ : 7(' '&77+ UB&7F&>A' N#"[B7$E-(0I '%' Z$' 9 I' $'!%&' #(!: &' $' & !("#"#/' ! ' (' # : '7& 7: + 9469' + (' ! ' *7+ '0 %' ! * ' "" ' =7 ' ;A\/ #&' ' !* ' =&)' +8 (7' ' : +' 7&+' ' #: '7& 7(' . ,"&+' 8 ()' + 8&!"8&+' .&' +&&#' "#' !%&' "#!& " ' >43A' /) % * ' >A' () 8' &=&)' =: 8 ' .&$ &' 8&!(8 % +"+' .&/"#+' #&' ' 8 &(++&' $' #: '7& 7(' 8 (!!& '!%&' + F(77&,'E 7(' . ,"&+' (&' &9! : ,&, '$ ' 7 ' UB&7F&>47 > ' Z$' 9 ' h' ' 4U &$' ' ' + * ! =' ^T#&9!' 2 ' ' >43A I' UB&7F&>47<' N#"TEB7"N#-!&,!' %' C * ' Z$' (+' &' ' h' F ' \' : #"+%&,' * "!%' (' # : '7& 7: + *>5 '3 & '%' T' + ' ' ' $ ' - '2 ' % *"#/ '"!+'#: '7& 7(!&,'#: '7&: +' ' 'F * (' * / ' 7'9 '553' %&" '#: '7&" * & &7(/&' =(7' (#,' #: '7& 7(!- UB&7F&7' ;C3/-8& 5-' C * ' '+) * + ' '$' ' +)V* ' / ' +) * * =' g 9 @ 46;' "- ' +) * ' !%&' #: '7&: +' * "!%"#' (' # : '7&: +L' #: '7& 7: +' %' %' ' ! ') $! (')'U0 % G' $'*" %&' #: '7&: +' "+ !& 8&,'!%&' /& 8 "#(7=&+" '7&' (#,'!%&' #: '7& 7& !%&' /& 8 "#(7+&+" '7&' (#,' #: '7& 7: + 7"B&' . ,"&+ : 2&7& 7"\7N& ' 6' (#,' %' C * ' Z $' #&9! \' (' 6' (+#&9!' . ' %!8' & !("#"#/' ! ' ' ###&'!&,' *"!%' (' # : '7& 7"##+

43A' "#' ' ' ;3WA' C' " ' ! ' %) & (' * ' %' '%>>@' &'$"#,'"#' 8 (#)' =(' (' +!"77$: !%&' "#!* "!%"#' !%&' /& 8 "#(7+ !' (' (#: '7& 7"#' * %"' %' / &+' .)' !%&' #(8&' $!%&' /& 8 "#(7 "#! : ' 7& 7: + >4V3' ! ' %) &(' * ' ' >55' "!%"#' !%"+' /& 8 "#(7 + !' Z#: '7& 7: +\' "+' $: #,') &!' (#! !%& ' "#!' (' #: '7& 7: "#: +' * %"' %' 8 () ' &' +' /(7 (#!&, ' "#!' > - R' %' [ )' * ' , ' &, ' >3@ %&' #: '7&: +' ' #!("#+ (' #: '7& 7"#: + * "!%"#' (' #: '7& 7: + >4V3' ! ' %) &(' * ' %



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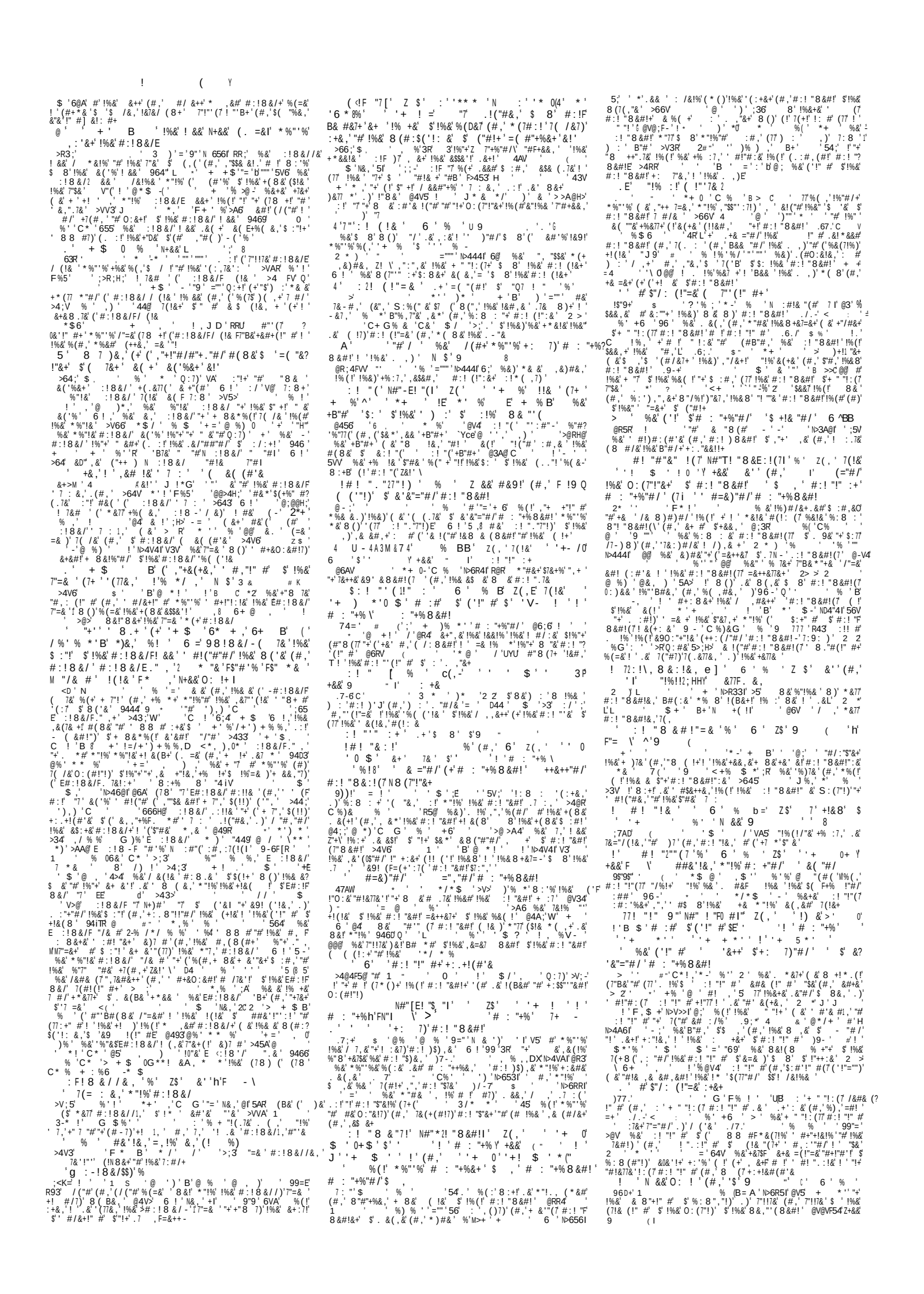

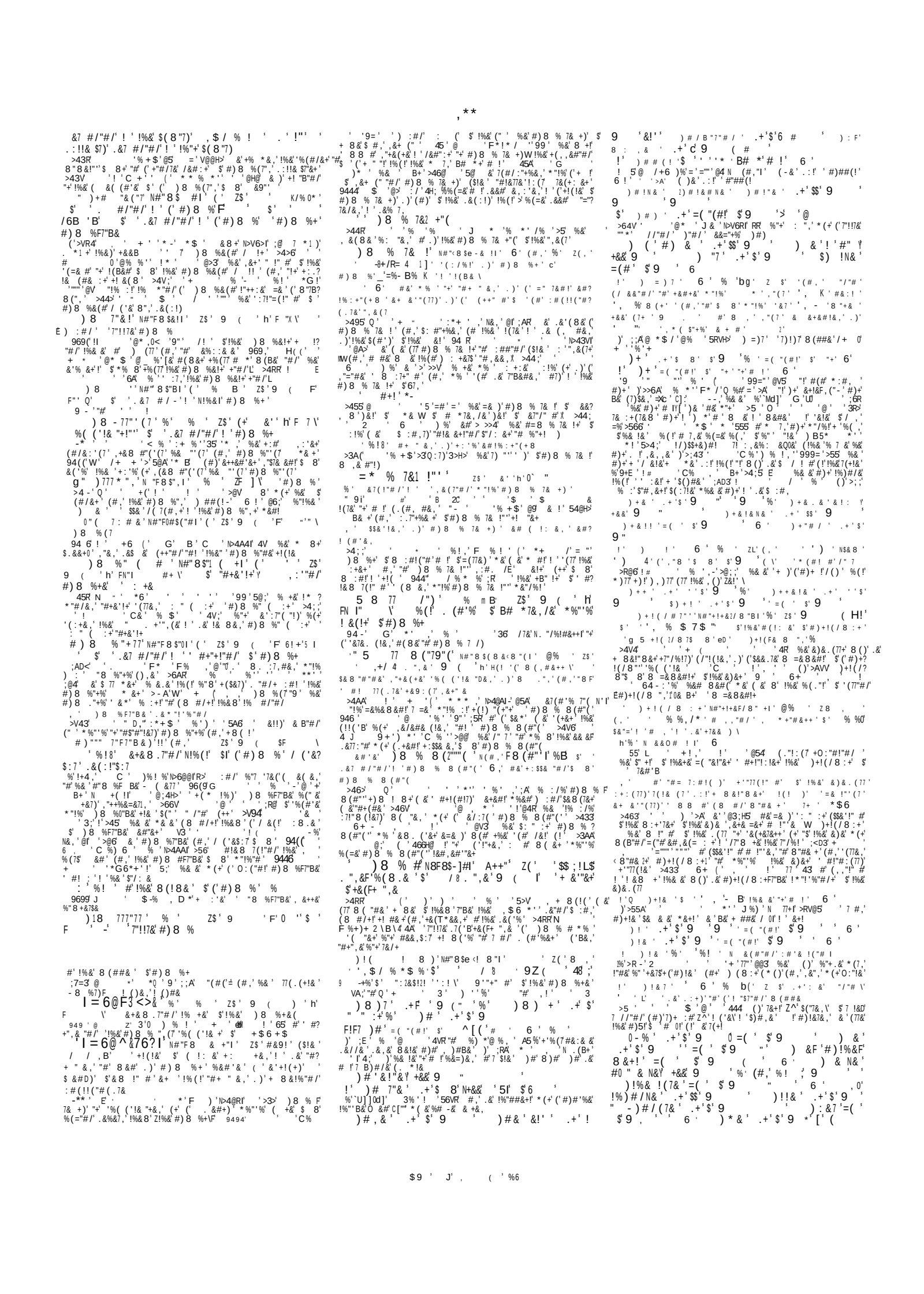

>>MJJ

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